

THE SECRET

OF THE

PACIFIC



C. REGINALD ENOCK







THE SECRET OF THE PACIFIC

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BY THE SAME AUTHOR

## THE ANDES AND THE AMAZON.

(*Fourth Impression.*)

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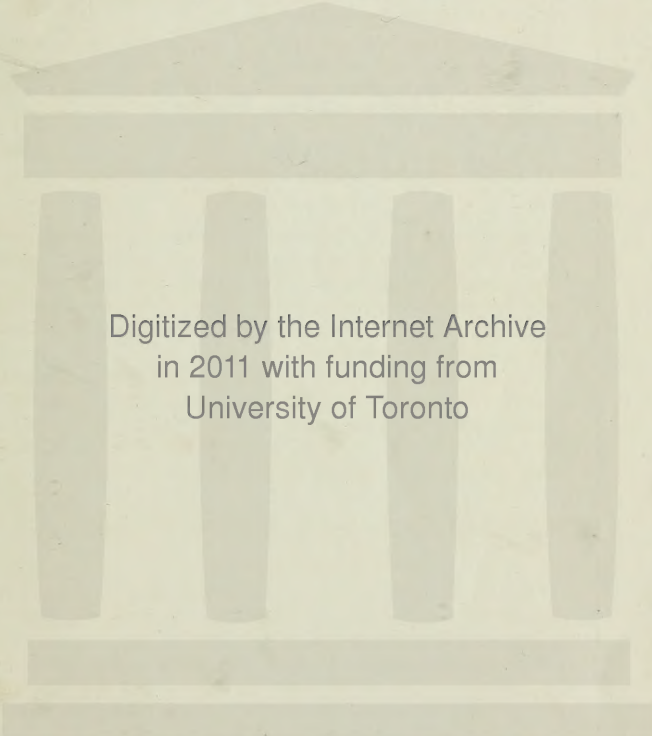
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COATLIQUE, THE AZTEC WOMAN GOD.

(See page 102.)

Frontispiece.



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# THE SECRET OF THE PACIFIC

A DISCUSSION OF THE ORIGIN  
OF THE EARLY CIVILISATIONS  
OF AMERICA, THE TOLTECS,  
AZTECS, MAYAS, INCAS, AND  
THEIR PREDECESSORS; AND OF  
THE POSSIBILITIES OF ASIATIC  
INFLUENCE THEREON

BY

C. REGINALD ENOCK, F.R.G.S.

AUTHOR OF "THE ANDES AND THE AMAZON"  
"MEXICO," "PERU," "FARTHEST WEST"  
"AN IMPERIAL COMMONWEALTH," ETC.

WITH 56 ILLUSTRATIONS AND 2 MAPS

T. FISHER UNWIN

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## PREFACE

IN regarding archæology some curious reflections may arise in the mind of the student. What is the true age of man's stone-building art? We seem to find overlapping rather than evolutive stages therein, as if man had suddenly learned to build pyramids and temples from some Instructor, rather than by the process of evolution. Again, we may find our thoughts inclining to the reflection that there may have been long, unknown periods or cycles of civilisation on this globe, in relation to which the few thousand years of known or conjectured history are a mere last chapter. We might be tempted to think that man, as we know him, is the remains of a more perfect civilisation, or part of such a cycle, working his way up again, rather than being a pioneer of the race. There is no unreason in such a supposition. We are not bound to accept the finality of evolution, as at present conceived, either in the biological or the cultural sphere; and, indeed, the near future may bring some strong modification of it.

As regards the world's very ancient ruins, shall we ever discover some exact mechanical process for determining their age? Will it one day be possible by some hitherto unsuspected process or attribute to assign the number of

sunrises or earth-revolutions and sun-cycles that have passed since a given wall was erected or a given stone taken from its quarry bed? May not alternate light and darkness have left some calculable impression on "scarped cliff and quarried stone"?

One poignant reflection there is: that man could build such beautiful dreams in sculptured stone as in all ages he has, and yet be so barbarous to his kind. Temples have generally been synonymous with cruelties and sacrifice. Furthermore, Masonry, whether as an Art, whether as an Order, presents itself to us mainly as a great Pretension, which embodies little of the milk of human kindness, but which rather separates man into selfish sects. It is after the lapse of time, when temples and palaces have become monuments, that we revere them—the perpetuation in stone of sentiment and faith.

As to the problem of the ancient American civilisations, it is an old one, a mysterious one, and certainly not to be explained with ease, either one way or the other. There are many factors to be taken into account as concerns their origin; and even to connect such origin with some ancient cycle of civilisation or lost continent is not outside the field of admissible conjecture; as if both their cultures and those of the Old World were offshoots of some parent stock, long since buried in the mists of age and change.

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# The Secret of the Pacific

## CHAPTER I

### WHAT IS THE SECRET?

Unknown empires—The lure of universalism—On the trails of Cortes and Pizarro—Arizona and the Cliff Dwellers—The wonderlands of Mexico and Peru—The “Unknown God” of America—The marvel of Easter Island—From Peru to Egypt—From Mexico to Asia—Biological and cultural aspects—The speechless anthropoid—Man’s ancestor in America—Across Behring Strait—Geographical similarity of America and Asia—Man’s original cradle-land—The “Stones of the Sanctuary”—The Aztecs and the Incas—Chinese origin?—Nothing new under the sun.

WHAT do we mean by the Secret of the Pacific?

Set between the world’s mightiest oceans, the Pacific and the Atlantic, lies that greatest of all islands—the twin-continents of America. A great mystery still shrouds these twin-continents, a riddle still unread, for whose solution the world may be said to have waited four hundred years. What is this mystery?

History would have us believe that these great seas had roared defiant, uncrossed by man—with the exception, grudgingly admitted, of some shadowy Northmen from Europe in 983—until the end of the fifteenth century A.D., and that these great continents, until then, had been unvisited from the outside world since time began. Yet, scattered for thousands of miles throughout the forests and deserts of these twin-continents are the remains of civilised empires which once flourished there: the ruined temples, palaces, pyramids, and habitations of peoples and nations who arose, fell, and rose again, ages before the caravels of the Vikings and the Conquistadores turned their prows towards the setting sun.

What I have ventured to term the Secret of the Pacific is the mystery surrounding the ancient civilisations of the three Americas, the homes of the Toltecs, the Aztecs, the Mayas, the Incas, and their predecessors. What was their origin? What was their connection with each other? Had they any link with the Old World? Did they in olden times, draw inspiration and knowledge from Asia, Egypt, Babylon? If not, and they sprang unaided from their own soil, and created their own culture, what were the conditions of their independent development?

These, of course, are not new questions. Indeed, they are well worn, and scientific dogma and sentimental discussion have long centred about them—opinions and theories, however, which are widely scattered, or contained in erudite and inaccessible tomes, out of reach of



the general reader, for whom the present work is intended.

It is not, however, a journey through library shelves alone that we shall undertake here, but an actual traverse, at least in part, of North and South America: those great regions forming the Western world which we erroneously term "New"—the ancient world of America before Columbus. Upon the trails of Cortes and of Pizarro my travels have taken me; trails which in some cases are almost as remote and difficult to-day as they were when first traversed by the white man from Europe, and the horse first ascended the Andes. We shall follow those paths, but to such journeyings we must add other incursions through space and time, both real and conjectural, which will take us from Mexico to Egypt, from Peru to Babylon, from the American shores to the strange islands of Polynesia. From those broad regions where the Toltec, the Aztec, and the Inca flourished we must seek to gather up those threads which some have conjectured lead to Asia; which, could we but unravel them, might establish some co-relation of man and his arts between Asia and America, and, that said, of man throughout the world. It is an alluring theme, but we shall embark upon it with an open mind. It is not our purpose to establish new theories, but rather to inquire into the case, to observe what has been accomplished in its solution, and what remains to be done.

What are the monuments left by these ancient

people, and what are the evidences of their civilisations? For four thousand miles or more they lie upon the Western American littoral and Cordilleras, and seem to extend in isolated patches across the Pacific Ocean in a north-west path to Asia, like vast stepping-stones between the Old World and the New. In the rocky, ravines and scorching *mesas* of Arizona and Colorado, wildernesses whose trails were first mapped out by the bones of hardy explorers, are the extraordinary habitations of the Cliff Dwellers. On the high slopes and tablelands of Mexico are strange pyramids and mysterious courts and quadrangles, with carved stone halls about them, a puzzle to the beholder. In the dense, tropic forests of Yucatan are the sculptured façades of palaces and pyramid-temples of exceeding beauty and ingenuity, ruined and abandoned, or surrounded here and there by the wattle huts of half-savage Indians. In Central America sculptured stelæ of great beauty and peculiarity protrude strangely from the jungle, whilst far away below the Equator, along the scorching coastline of Peru and amid the bleak tablelands and snow-crowned ranges of the Andes, are cunningly-wrought temples and impregnable fortresses, which could only have been fashioned under the mandates of ruthless, new-world Pharaohs or devout American Solomons. In the Mexican deserts and by the waters of the mysterious Lake Titicaca of the Incas, the Sun God and the Moon God held sway, and from unnumbered centuries ago ancient worshippers

raised great temples to the "Unknown God." Deepening the mystery still, there arise, strange and grim upon solitary, sea-girt Pacific islands in the track of the setting sun, colossal images and fortresses, whose origin no man can conjecture. Here, in brief, are the chapters, written in stone, of some great and perhaps universal history—a history which, so far, we have not been able to inscribe in the general plan of human record.

This, then, is the Secret of the Pacific. What was the origin of the people who fashioned these structures and planted the civilisations of early America? Did they simply spring from the soil of the New World, independent of outside influence, and evolve their arts upon it? Or were they and the germs of their art carried thither in dim ages past? Was it some prehistoric migration of intrepid or persecuted man, who from some Asiatic cradle-land made his way across endless steppes and boundless seas, bearing in his breast the germs of civilisation and the stone-shaping arts that first tenanted these wilds of the three Americas? Were they pioneer offshoots of some Eastern potentate's magnificences—some ambitious priests or would-be kings, envious of the power that built pyramids and palaces under Oriental skies, who privily adventured forth to seek a dominion where they themselves might be paramount? Did they, from their erring memories, or the skill of craftsmen they had lured with them, build up these replicas of pyramids and palaces and towers of Babel amid the

deserts and mountains of a new land? Were they and their works part of the scheme of man and history of which ancient Assyria and Egypt were the earlier chapters?

If they were we shall be forced to reflect that they covered up their trails remarkably well, and supposing that to be true, it is indeed a case for some antiquarian sleuth-hound, some archaeological Sherlock Holmes! If they were not and we are to consider them as an indigenous, autochthonous manifestation of the works of Nature and Providence in a special hemisphere, there still remains the contemplation of very remote times in which their arts were evolved—times which could scarcely have been less remote than those which were necessary for the development of man's handicraft in the lands of the Euphrates and the Nile.

Both theories, the imported and the autochthonous, possess attractions. To regard mankind as coming from a common source and central point and having spread over the face of the earth, rather than having been generated at several points simultaneously, carries with it a certain sense of satisfaction. It seems to give man a greater standing to suppose that the Divine spark of his origin was engendered in one place only, and upon a "special occasion," rather than, like trees or animals, to have come to being in the four corners of the earth profusely and independently. The natural tendency to trace man, wherever he may be found, to a common origin is, popularly, very strong. Although we might

maintain that the biblical account of man's origin, assigning a definite point in time and space to his appearance, might be given a wide interpretation, nevertheless it is something of a shock that we experience in the possibility of man's appearance as scattered and independent races, and not as a special being derived from one spot.

But if on the one hand we love to trace mankind to this common origin, the other contention of independent generation is not without certain allurements and compensating circumstances. There is much in the idea, to the philosophical mind, that Nature, having reached a certain point in her workings when it was time for man to appear, brought him to being simultaneously in several parts of the world. Nature might be regarded as having been pregnant with the coming of man, and as giving birth to him in Asia, Africa, and America simultaneously. The time had arrived for man to inherit the environment which—man feels he may assume it as true—had been prepared for him, and this appearance may not necessarily have been confined to a garden by the Euphrates alone.

It is to be recollected, and the reflection is an interesting one, that the "new" world of America is in many respects a replica of the "old" world of Eurasia, or Europe-Asia, "with the corresponding parts reversed, right and left, like two hands" as it has been said by geographers. The regions of the lakes, the mountain chains, highlands and lowlands, have or have

## 24 THE SECRET OF THE PACIFIC

had their counterparts in both worlds, and with their geographical resemblances and similar geological ages and formations form truly remarkable likenesses of each other. At the time when geological knowledge was less advanced than it is to-day the idea was prevalent that the new world of America was an "old world" geologically, and the old world of history a "new world" geologically. In reality both worlds are old geologically, or at least, in general terms neither can regard the other as its senior. They were both equally ready for human life, and in both have men had equally to struggle to support it.

There are, of course, two considerations to be faced in this contemplation of man's presence in the New World—one biological, the other cultural. That is to say, was man as a being indigenous to America, and was his prehistoric civilisation indigenous, or were both conditions imported ones? It is the opinion among ethnologists that the same inherent mental nature is to be recognised in all men, and that when we compare this fact with our knowledge about the doings and thinkings, learned, by scientific observation, of all the races of people on the earth, we are entitled to draw the conclusion that all human races are of one species and one family. It is held generally that the stock races of America must have descended from this one family, because there are no anthropoid apes in America, none of the ape family higher than the Cebidæ, from which it is impossible to trace man.

As for Australia there are not even Cebidæ in that continent.

The anthropoid apes, it will be well to recollect—the man-like apes found only in the Old World (although even this has been disputed)—are of special interest to those who accept the “Darwinian” theories, due to the place in Nature assigned to them by the evolutionists.

Whilst it is generally admitted now “that no fundamental difference as regards anatomical structure exists between these higher apes and man, it is equally true that none of this species is in the direct line of human ancestry. There is a vast gulf to be spanned between these man-like apes and even the very lowest race of mankind, by some ‘missing link.’ Such a link, indeed, in the form of a creature reconstructed from the fossil remains of an erect ape-man found in the forests of Java—the famous *Pitecanthorpus erectus* of Dr. Dubois—is believed in by some.” Into this field, however, we shall not intrude much here.

It is, therefore, generally recognised as a scientific fact that mankind is specifically of one family, and in such case it is to be argued that he must have had an original “cradle-land,” from which the peopling of the earth was brought about by migration. Where was this cradle-land? The evidence seems to show that, first of all, the world “was peopled by a general proto-human” form and each division of man would thus have had its pleistocene ancestors, and would have become differentiated into races

by the influence of climatic and other surroundings. As to the cradle-land, there have been many theories, generally inclining towards the strange region of Indo-Malaysia, into which it will be also our business to enter in this volume.

But how could this migration from a remote cradle-land in the old world have taken place into the new world of America, which is an island? Geology has been able to show the existence of earlier continents or pre-arrangements of continents; that the earth's crust has undergone great changes. Complete land communication, it is held, existed from Indo-Malaysia. An Indo-African and a Eurafrikan continent are shown to have existed and the extension of Australia towards New Guinea formerly is held to be probable, and thus "man's ancestor was free to move in all directions over the Eastern Hemisphere." As for the Western Hemisphere, this was probably connected with Europe and Asia, in Tertiary times, geology assumes, by a continent in the one case from Scotland through the Faeroes, Iceland, and Greenland, and in the other by continuous land, over what is now Behring Straits, just as South America may have been connected with Australia by a Pacific continent and with Africa by an Atlantic continent.

Are we to suppose, then, that the only contact between the beings of the Old World and the New was in those remote times before man was really man, when he was still little removed from the brute and had not yet been made white, brown, or black, such as his climatic environment



assigned to him? This would not greatly help us in the solution of the Secret of the Pacific, and we must inquire more closely of the possibilities of prehistoric immigration. It may be assumed on the one hand that in some far distant epoch a speechless anthropoid passed over a land bridge between Asia and America where Behring Sea now rolls, which sank behind him, as has been suggested, or that via an Atlantic continent where now Iceland and its surrounding oceans stand the French cave-man came to America, or that the "long-headed Eskimo-Botocundo type and Mexican round-headed type" reached the New World from the Old by either route, before man had any culture at all; or again that wanderers from the Malayan world drifted to the South American coast. Whether these conjectures be true or not is a question which doubtless will receive further elucidation; but it is agreed by many ethnologists that the aborigines of the Western Hemisphere came from the Eastern, even if biological evidence of Caucasoid or negro blood in the American's veins before the immigrations of known history is lacking.

But before leaving the matter of the origin of man's ape-ancestor-relatives it is to be recollected that knowledge upon these points is very incomplete. Anthropology and evolution are but new sciences, and still in a state of flux. It may be established yet that man's immediate ancestors did come to being in the New World equally with the Old, and that closer research and exploration will reveal this, proving that

America was, as has been maintained,<sup>1</sup> "on the basis of the discoveries of fossil anthropoids and fossil man in southern South America, the scene of origin of man himself." Discoveries are constantly being made which cause modification of existing theories and even force upon the scientific world alterations in the calendar formed from the rocks and drifts. New pages might be added to that diary at any time, new discoveries at unexpected moments.

Here we will take leave of the biological problem. From the wanderings of the speechless anthropoid to the builders of sculptured palaces is a far cry. The cultural problem may or may not be explained by the existence of very primitive men; or rather it does not seem to provide satisfactorily for the similarity of man's arts in the widely separated regions of Asia and America. It is, of course, arguable that, given primitive man and natural resources, he will evolve habitations and even property; that he will pile one stone on another to form walls for dwelling-place or defence. But is he likely also to evolve details of design and ornamentations of similar character in two different worlds?

It will be seen from these preliminary remarks how vast is the field upon which we have to enter, in considering the origin of man and his culture in America. There is scarcely a country in the world which is not in one way or another capable of being drawn into the matter. It involves,

<sup>1</sup> By Ameghino.

but literally, not figuratively, a survey of the world "from China to Peru"—that well-worn aphorism of travel-lore, and many branches of science are involved in its intelligent consideration. To attempt all this in the scope of one volume would be an ambitious task, but, as I have stated elsewhere, the purpose in view is to stimulate further inquiry into this fascinating but neglected subject, rather than to produce a compendium of all the information concerning it, which would be impossible.

Thus, the principal question we have to ask is: Is it reasonable to suppose that these huge twin-continents of America have lain incognito by the great communities of Asia and the Old World until the mere yesterday of Columbus?—incognito throughout the ages of unfathomable time since mankind became a reasoning, constructive being? Columbus reached America less than four and a quarter centuries ago, and Eric the Red and his early Norsemen in 983—admitting this latter as a historical fact. Can we believe that the Chinese and other Asiatic people, so far advanced as they were in knowledge and science thousands of years before that time, had no knowledge of the land we now call America? It is an alluring theme, yet one which geographers and historians seem to have neglected strangely.

Whatever may be the answer, we are constrained to reflect that these "new" worlds of America have been the scene of cycles and changes of humanity throughout very long

periods, eras of activity of which the remains we now see in these deserts and forests are but recent evidences, links fashioned upon older ones. America must have been the theatre of a strange and extensive activity during its past. We are reminded at every turn, in these mouldering ruins, of the doings of bygone peoples. "The stones of the sanctuary are poured out in the tops of every street"—literally, in these ancient, silent communities of Mexico and Peru. "How doth the city sit solitary that was full of people! How is she become a widow!" might indeed be the lamentation of some unchronicled prophet about these perished empires of the Aztec and Inca, whose pathetic story, still unread, lies before the traveller to-day.

The subject of pre-Columbian influence upon America had always interested me strongly, but I have looked in vain for a full and impartial research into its truth or falsity. I pondered upon it among the coast-hills of California in 1894, where fancy might seem to conjure up the forms of prehistoric junks, laden with men from Asia, sailing out of the sunset, and later in the shade of mouldering walls and pyramids in Mexico, sheltering from the noonday sun, or among the ruined strongholds of some ancient Peruvian chieftain of the Andes, where I had sought refuge from the cold after many a hard day's ride, the same problem haunted me. Thence, letting fancy travel over the vast Pacific, among its scattered islands, with their extraordinary images and

walls, from Easter Island to the Carolines, stretching out to Asia—structures to whose origin we have no clue—the imagination is in danger of running riot. Nature, geography, and man are strangely and pathetically associated in this great mystery of the Pacific, and once more we learn that there is nothing new under the sun.

## CHAPTER II

### WHENCE AND HOW

Asiatic and American enigmas—The fault of topography—Preservation of ruins—Wilful destruction—Universal attributes of primitive man—Evolution of the pyramid—Stout denials of connection—Indigenous culture—Wide-spread cradle-lands—From China to Peru—The theory of imported origin—Opinion of Humboldt—Analogies with Egypt—Yucatan and Ceylon—Central America and Java—The Maya Arch—No real arch in America—The “lost ten tribes”—Lord Kingsborough’s work—Mexico the origin of Egyptian art?—Across Behring Straits—Junks from China and Japan—Kublai Khan—Personal impressions—The Asiatic eskimo—Polynesian influence—Easter Island—Yucatan as the lost Atlantis—Similarities of art—Evolution of Aztec and Inca arts—The universal Sun God.

WHY, we may ask, has this enigma of the Pacific not yet been solved? Assyria and Egypt yield up their secrets—why not America?

It is a satisfactory reflection that the farther we recede in time from matters of antiquity the more does their true history tend to become revealed. The labours of painstaking students and the results of archæological expeditions sent out to grapple with hidden secrets and treasures of history upon the spot are constantly affording evidence that a great mass of obtainable know-

ledge exists, waiting to be uncovered and pieced together.

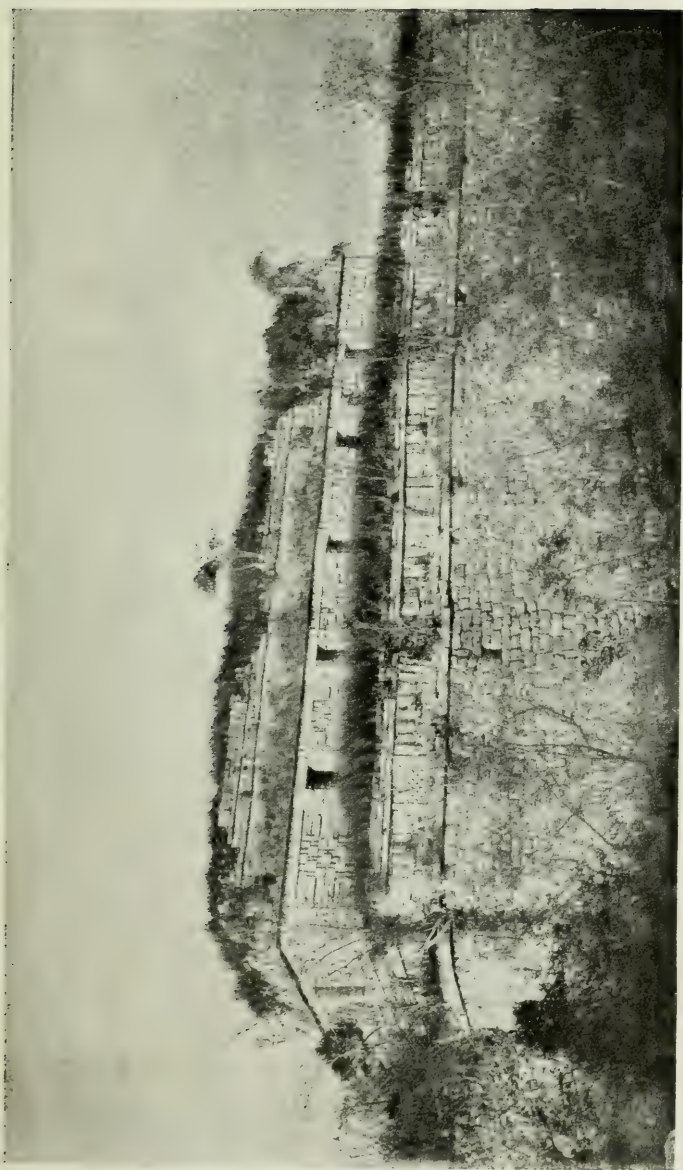
We are, however, legitimately entitled to ask how it is that ancient Asia yields up its secrets whilst ancient America does not, or not yet. The reply is to a large extent in matters of inclination and interest, and obvious enough. The Old World, the lands of the Bible and the Classics and their people, are intimately bound up with our own life. They are part of that chain of civilisation of which we to-day are the latest links, and everything we learn about what they did does but add a chapter to our own history. Not so with these lost civilisations of America, or not unless we can show that they have had any part in a vast general system of which all cultures were offshoots. But there is also another reason for the comparative neglect of ancient America, which may be summed up in the word "topography." Not only in the New World is the glow and colour of Oriental populations wanting, but its inaccessible conditions have to be considered. The remote valleys and inclement plateaux of the South American Andes and the malarious forests of Yucatan, where the buried temples of the prehistoric American Pharaohs or Belshazzars lie, are in marked contrast with the enjoyable climate and relatively open lands of Egypt and Syria, where such extensive and painstaking antiquarian work has been carried out. Professors and students have there the surroundings of a summer holiday, but it is not so in the great deserts and mountains of North and South

America. A pioneer spirit, a long purse, and hard journeyings, and hard fare on mountain-trails, with the odour and lore of the mule and the saddle, are the necessary adjuncts of investigation in the vast field of Spanish-American archæology. From the Euphrates to the Nile is but a thousand miles. The world as known to the ancients was but a small circle, but the world of early America covered a zone of half a hemisphere. For one student in this field there are fifty for Egypt or Babylon.

Nevertheless, it is not to be supposed that American archæology has been neglected. Famous archæologists have devoted years and fortunes thereto, and their fascinating works are to be found in the libraries. The Governments of some of the American nations are alive to the value of research now. In the United States a Government Bureau of Ethnology has explored and protected the ruins of the Cliff Dwellers. In Mexico the Government has trained antiquaries in the field and maintains valuable museums. Even in Peru a Governmental Historical Institute has been established and European advisers retained for the study of the ancient cultures of the land: and Bolivia has its museum.

But in Central America and South America it cannot be said that there is any particular care of the ruins exercised, and havoc and destruction is being wrought upon the famous sites in many places, both by nature and man. In Yucatan the natural levers of root and branch in tropic jungle are efficient agents in throwing down





RUINS OF CHICHEN ITZA, "THE HOUSE OF THE NUNS" IN YUCATAN.



pyramids and walls which the ignorant inhabitant only spares because of their inaccessibility. In the Andes the native shepherd ruthlessly takes lintel, quoin, and sculptured block, which have been produced with the love or agony of his unknown predecessors, to build a corral for his cattle ; and not alone the ignorant shepherd, for modern railway builders of Anglo-Saxon race have carted away from the ruins of Bolivia the stones of sanctuaries in train-loads to build their warehouses and bridges.

It is surely time for some combined international action in preserving and investigating these beautiful and irreplaceable chapters in stone of the history of the Pacific, to supplement the work of private explorers and antiquarians—French, German, American, and British. The subject of pre-Columbian culture in America is of world-wide interest and importance, and must more and more occupy the attention of Americanists of all nationalities. Further, there must be some “ commercial ” value about these ancient sites. In the United States the community is fully alive to the value of the old Cliff dwellings as an attraction for tourists, and surely the beautiful buried temples of Central and South America are of such value as ought to warrant the utmost jealousy in their preservation.

We have now to consider—and it is a question of first principles which bears intimately upon our subject—whether, given primitive man in America (or elsewhere), he could evolve arts similar to those of the Old World. The teachings of anthro-

psychological science after world-wide research have tended largely to cause the abandonment of the old theory that a similarity among independent peoples of customs, myths, arts, and crafts warrants an assigning of them all to an early cousinship; or at least that is the present tendency, which may or may not change. We are constrained to think that there has always been an inherent genius in man, which, allowing for variation in environment, tends to develop culture along similar lines. This has been succinctly put in the article on anthropology in the last edition of the *Encyclopædia Britannica*, from which I will quote here, as representing recent thought on the matter: "American man need not owe the minutest portion of his mental, religious, social, or industrial development to remote contact with Asia or Europe, though he were proved to possess identical usages. An example in point is that of pyramid-building. No ethical relationship can ever have existed between the Aztecs and the Egyptians, yet each race developed the idea of the pyramid tomb through that psychological similarity which is as much a characteristic of the species man as his physique."

This is, of course, tantamount to a declaration for the autochthonous theory, and we may accept it or not as regards America. The whole question hinges upon it, and, as we have preferred to think, the question cannot be denied or affirmed in its entirety, so far.

There is, indeed, a strong school of thought in

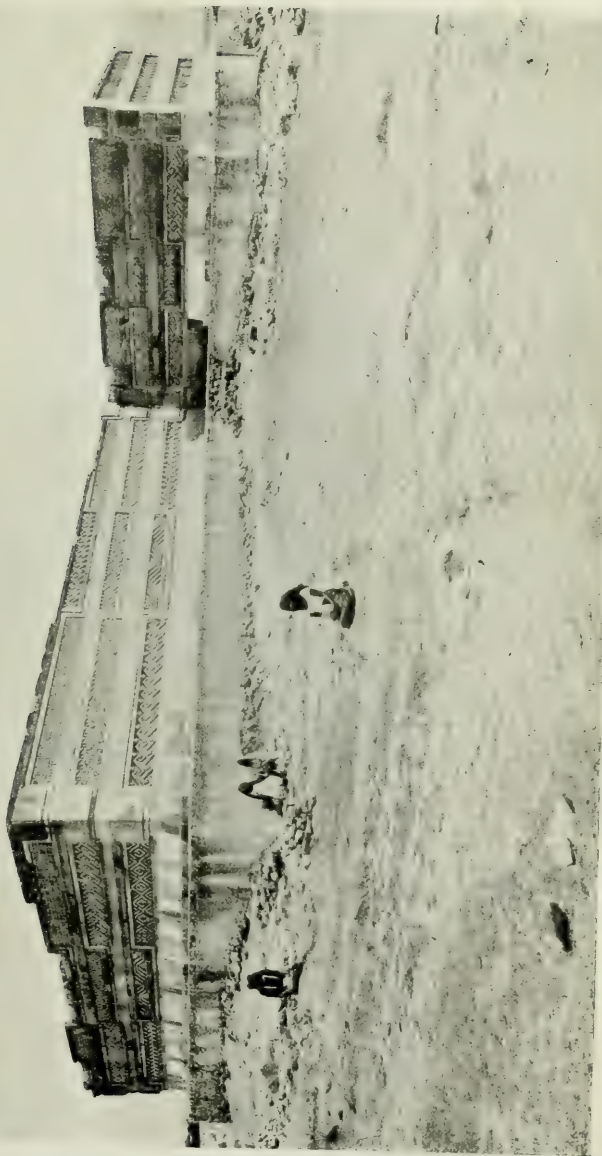
this respect which absolutely denies any borrowed culture for early America and asserts that such things are vanity, and proclaims that there is nothing about the Mexican and Peruvian cultures which cannot be attributed to natural development. I shall quote several American opinions upon this point, first that of the able writer of the article "North American Indians," in the publication last mentioned, and this I will give literally, as expressing a downright view. The writer is an American professor of anthropology, a high authority upon the subject. He says:—

"So far as is known, the primitive culture of North America is fundamentally indigenous, being the reactions of the Indian to his environment, added to whatever rude equipment of body and of mind was possessed by the human beings who at some remote epoch reached the New World from the Old. The North American Indians have been the subject of numerous popular fallacies, some of which have gained world-wide currency. Here belongs a mass of pseudo-scientific and thoroughly unscientific literature embodying absurd and extravagant theories and speculation as to the origin of the aborigines and their 'civilisations' which derive them (in most extraordinary ways sometimes), in recent or in remote antiquity, from all regions of the Old World—Egypt and Carthage, Phœnicia and Canaan, Asia Minor and the Caucasus, Assyria and Babylon, Persia and India, Central Asia and Siberia, China and Tibet, Korea, Japan, the East Indies, Polynesia, Greece, and ancient Celtic

Europe, and even mediaeval Ireland and Wales. Favourite theories of this sort have made the North American aborigines the descendants of refugees from sunken Atlantis, Tartar warriors, Malayo-Polynesian seafarers, Hittite immigrants from Syria, the 'Lost Ten Tribes of Israel,' &c., or attributed their social, religious, and political ideas and institutions to the advent of stray junks from Japan, Buddhist votaries from south-eastern Asia, missionaries from early Christian Europe, Norse Vikings, Basque fishermen, and the like."

These statements, whilst worthy of every respect, cannot fail to give the impression that their writer does protest too much. It might even give rise to a suspicion in the mind of the reader that they are impaired by some curious prejudice, such as is observable in other American writers on the subject, notably Dr. Brinton, quoted in a later chapter, another eminent authority; as if American philosophers resented the suggestion that early America had borrowed anything from Europe or Asia, and desired to conserve for America the credit of having been able to evolve its own culture. It is true that there has been much unscientific writing on the subject, but on the other hand, famous scientists, both American and others, have supported the opposite view, of derived or imported culture-origins for America. Among these was the famous and accurate Humboldt,<sup>1</sup> and, to-day, is the famous scientist Dr. Alfred Russel Wallace, whose views are expressed in his

<sup>1</sup> "Vue des Cordilleres."



RUINS OF MITLA, SOUTHERN MEXICO.





letter to me quoted elsewhere. Some writers have expressed the opinion that Humboldt's views are out of date, whilst others adopt them as the principal authority. Among European students of the subject the tendency seems to be to preserve the "open door" to the prehistoric immigrant into America, and possibly this tendency is becoming stronger. In a desire only to investigate and approach nearer if possible to the truth of the subject all sides must be considered, and throughout these pages numerous authorities, for and against, are quoted. If these appear to involve some repetition, that is inevitable in striving for a consensus of opinion.

In admitting the theory for a derived origin for these early American civilisations we are at once confronted with the question "whence?" followed inevitably by "how?"

As has been remarked, theories and analogies have been adduced pointing to nearly every Oriental country as this place of origin—roads which, in greater or less degree, seem to terminate in "that blessed word Mesopotamia!"

That is to say, that strong family likenesses have been encountered by some observers between Mexican and Peruvian customs and objects of antiquity and those of China and Chaldea. The civilisation of China, it is generally agreed, was connected as to its origin with Babylon. Egypt also furnishes examples, some of which cannot easily be brushed aside. India, China, Japan, Java, and the Malay Peninsula have been pointed to by other students, especially as

concerns the ruins of Yucatan, as the real issuing-point for the early Mexican stone-shaping art. So remarkable are the similarities in one or the other fields that such theories have much to excuse and even to support them. The beautiful temples of Chichen Itza, one of the principal groups of the Yucatan remains, have been said to bear a striking resemblance in some architectural features to some of the ancient structures of Ceylon. The great temple at Palenque, another of the Yucatan groups, has been likened, to the satisfaction at least of one of the explorers of the middle of last century, as regards some of its details, with the temple of Boro Budor in Java. Similarity is adduced from the fact that the truncated pyramid crowned by a temple was characteristic of Buddhist structures, and that the Yucatan buildings are of this character. Certain resemblances in workmanship and design certainly appear to be traceable. The Maya " Arch " so-called, for it does not embody the principle of the arch, is also found in Buddhist structures, and according to some writers, in no others except in those of Yucatan.<sup>1</sup> It occurs in Peru, however. The circular arch, vault, or dome is not found among the early American structures nor any suspicion of it in prehistoric times, and if any relation existed between the ancient Mexican and the Egyptian this is strange, as the arch exists from earliest times as an Egyptian structure.

<sup>1</sup> "The American Egypt," Arnold and Tabor, gives an interesting dissertation on this subject.

Indeed, one explorer, Dr. le Plongeon,<sup>1</sup> who spent a fortune and part of a lifetime in the investigation of the Mexican ruins, declared as a result that not only were the Mexican and Egyptian civilisations connected but that the Mexican was the origin of the Egyptian! This announcement was received with scorn and incredulity by other archæologists, and we shall have occasion to refer to this matter later. Yet another famous student, Lord Kingsborough, strove to prove that the early Mexicans were the lost ten tribes of Israel, a view earlier advanced by a Spanish historian. He also spent a fortune in his investigations and publications, which have been of great value even if his views were not accepted.

As to the "how," the first theory that has presented itself is that of prehistoric immigration via Behring Strait, a matter which will be constantly discussed in these pages. It is conceivable that men, bearing in their bosoms knowledge of the stone-shaping arts and of the type of civilisation of the East, crossed the few miles of open water which separate Asia from America, doubtless in skiffs or primitive craft, and made their way thence over North and South America. Further, it is conjectured that vessels or junks may have been blown out of their course, or aided by the Japan current and so arrived upon the American coast. It is even stated that in the time of Kublai Khan a Chinese vessel landed on the shores of Peru,<sup>2</sup> and it is at least conceiv-

<sup>1</sup> See p. 133.

<sup>2</sup> See p. 241.

able that the later periods of early American culture might have been influenced by such direct contact. There is no reason why such unrecorded voyages should not have been made, or why pre-Hispanic immigrants should not have arrived in that way. Indeed, it is a matter which cannot be lightly dismissed, especially when it is recollected that late in the nineteenth century "Japanese junks still drifted over by the ocean current to California at the rate of about one a year." Also, the Aleutian Islands form a sort of natural link between Asia and America.

In connection with this aspect of the subject, I shall venture here to record some personal experience. When in San Francisco I had among my acquaintances an educated Pole, who was an escaped political prisoner from Siberia, and a friend of his, who used to join us in cosmopolitan discussion, was an educated Chinaman. It was an expressed opinion by these men that America had been discovered by the Chinese long before the time of Columbus. Indeed, the idea of America being a discovery and property of Spain, only four hundred years ago, seemed to be regarded by them as a matter almost for humour. There was something impressive in this view. Surely a people who knew of the mariner's compass, of printing, of gunpowder, and who had inherited the wonderful scientific lore of their continent for thousands of years must have known of America. Is it not difficult to think that these great shores, facing the sunsets, a continuous

line twelve thousand miles long, could have slumbered ever since the dawn of history, and never received touch from that mighty civilisation of Asia which faces it on the other side? The astonishing secretiveness of the Chinese, when European travellers first came in contact with them, must have guarded the knowledge, and it is reasonable to think that the Chinese knew perfectly well that the land of America existed, but wished to keep the secret to themselves. As to the difficulty of navigation, are we in a position to state positively that in much earlier times the Chinese had no large vessels capable of crossing the Pacific? We know that junks have constantly drifted across, as mentioned before. I must confess to the belief that if the ancient libraries of Central Asia were ransacked and records diligently overhauled, we should find accounts of voyages or migrations from China to the New World, and perhaps the present awakening of China will enable these matters to be revealed. There must be records of this.<sup>1</sup>

As regards the possibility of ingress into America by Behring Strait, this has been a favourite theory, constantly discussed by many writers. It has been shown of late that the extreme north-western region of North America is of great importance ethnologically in this

<sup>1</sup> It is a curious coincidence that after writing upon this subject in the above strain I should have come upon similar ideas in a book quoted later on, which I had never seen before, viz., "Enoch," by Kenealy. See p. 333.

connection, and this is dealt with in a subsequent chapter.

There remains the hypothesis of Polynesian contact and influence on the Pacific coast of America, which has obtained a certain amount of acceptance by a few ethnologists. Such influence is held to be traceable, and upon its line of march must be considered the extraordinary remains of stone-shaping man upon Easter Island and the groups of islands of Oceania, descriptions of which are entered into in their respective places. Whilst we tread in that connection the ground of interesting speculation, and enter into an extremely involved tangle, such an influence is admitted by one of the most famous scientists, Dr. Wallace.

Fact and fable indeed crowd upon us in our attempt to unravel the mystery of the Pacific. Lost tribes and lost continents form part of the story, as will be seen. The fabled continent of Atlantis, and the supposed vigorous and cultured race who were reputed to inhabit it, also figures therein. I will quote from Dr. Holmes, the well-known American ethnologist, whose works on the ancient buildings of the New World are standard sources of information. He says:—

“It has been a favourite theory with many students that the American races may have been derived from this source”—referring to Atlantis—“inheriting therefrom the germ of that strange culture now represented by so many ruined cities. Whatever may be the truth with respect to the disappearance of the one continent, it is

a curious fact that another land has risen from its watery bed—that of Yucatan. Geology shows us this plainly. The massive beds of limestone of which the peninsula is formed contain, and are largely made up of, remains of the marine forms of life now flourishing along the shores. Fossil shells obtained from the rocks in various parts of the country are all of living species, and represent late Pliocene or early Pleistocene times, thus possibly bringing the date of the elevation of Yucatan down somewhat near that of the reputed sinking of Atlantis some eleven or twelve thousand years ago, or not far from the period that witnessed the oscillation attending the close of the glacial period.”<sup>1</sup>

The peninsula of Yucatan and its buildings is, indeed, one of the most interesting portions of the great field we are considering, and contemplation of its beautiful ruins and its singular geological structure has furnished a theme for the imagination of various writers; but as a science its archæology is still undeveloped, and in its infancy. But it is generally agreed that the accounts of the civilisations of Mexico and Peru at the time of the Spanish conquest show a state of culture which must have put the Spaniards to shame, as regards some of their attributes.

“The one problem that is of the greatest interest still awaits solution, viz., whether there is any relation, in culture or race, between the

<sup>1</sup> Holmes, “Ancient Cities of the New World,” Boston, 1864.

inhabitants of ancient America and those of Europe or Asia. One thing is certain, that if there be any connection, it is of infinite remoteness. But it is at any rate noteworthy that the same designs, patterns, and even games are found in ancient Mexico and India and China: and whether this arises by reason of accident or from borrowings is a problem worthy of most serious study. If once a key be found to the ancient Mexican inscriptions, so plentifully scattered through the ancient monuments, it may be that enlightenment will come even more suddenly and more surely." <sup>1</sup> This quotation from the same publication cited before, but by different authors, serves to show again how varied and contradictory are the views held upon the subject.

Whatever may be the real truth about the origin of these New World cultures, it must be recollected that there still remains the question, scarcely less interesting, of their evolution, supposing that they were absolutely autochthonous. It is impossible to suppose that these people, the Mayas and Aztecs of Mexico and Central America, and the Incas and Aymaras and others of Peru, could have evolved their arts, architecture, and languages in the period of a few hundred years. Their carved-stone buildings could not have been designed and originated by a people sprung from barbarism in four or five centuries. It would be as reasonable to assert that British architects were the originators of

<sup>1</sup> Encyc. Brit., "Archæology."





RUINS OF QUIRIGUA, GUATEMALA.

Stela 20 feet high, with hieroglyphics.



Corinthian or Doric architecture, in which half the public buildings in England are expressed, and that they had evolved those styles since the time of William the Conqueror! If the stone-shaping arts of Asia and the Old World took thousands of years to evolve, from the time when man first piled stone on stone to form a wall, must not these scarcely less skilful structures of the "new" world of America have taken a similar ratio of time to develop? If it be true, as observers assume, that the Maya buildings existing in Central America and the Inca buildings in Peru are not more than four or five hundred years old—and it seems a probably correct calculation—from what were they copied? They must have been copied from preceding structures, either elaborated or inherited. If these arts were autochthonous in America, and have no connection with outside, then America must have been developing them from times contemporary with Babylon and Egypt. The Quechua language of South America must have taken a thousand years to evolve, at least.

Apart from more concrete consideration, we observe a marked similarity between these strange old lands of the New World and those of the Old World, as we have before reflected, with the authority of geology and geography, to bear it out. We have the same deserts and stony mountains where man is ever striving to gather grapes of thorns and figs of thistles; the same patient people, tyrannised over by despotic potentates, the same pastoral pursuits, the same

“ aridian ” culture and beating sun—that atmosphere of the wilderness once felt never forgotten. In both worlds the Sun God was the native image to which these poor ancients bowed down or were sacrificed, and idol, tomb, ruined temple, and pyramid cover both regions with their mute and mysterious presence.

Having touched thus, lightly, upon the various aspects of the ethnic mysteries surrounding the Pacific world, we shall now enter upon a description of the particular places concerned ; not in great detail, for space would not suffice in a single volume, but broadly, inviting the reader to further study at the fountain-heads of information upon the subject.





## CHAPTER III

### THE TRAVELLER'S POINT OF VIEW

A few points of geography—Coast of North and South America—The great Cordillera—Ice and fire—Comparison with Bible lands—Seats of the ancient civilisations—Vast distances in prehistoric America—Arizona and California—Mexico, its people and railways—The republics of Central America—Good and bad qualities—Panama—Columbia and Ecuador—Peru, its people and mountains—Varied national traits—Chili and the Trans-Andine railway—Mongolian immigration in South America—A brief survey of the ancient ruins—Hints to travellers—Climate and equipment.

THE seats of these ancient civilisations of America, the Toltecs and Aztecs of Mexico, the Mayas of Central America, the Incas and pre-Incas of Peru, and others, were, it is to be recollected, separated by enormous distances, territories, consisting in many cases of almost inaccessible mountain ranges, sun-scorched deserts, and malarious forests—forming, indeed, the least habitable parts of the surface of the New World. As to the Pacific Islands, with their extraordinary monuments, they are separated by thousands of miles of open sea.

The American coast, from where it leaves the fringe of Asia at Behring Strait, which divides the Old World from the New only by some fifty-

six miles of water, follows a series of gigantic curves and tangents for more than twelve thousand miles to Cape Horn. Except for a belt on each side of the equator, and its northern and southern extremities, in British Columbia and southern Chile respectively, this great coast is arid, and the traveller approaching it from the sea beholds little that would attract him. Dreary, sandy wastes, inhabited by little except seals and sea-birds, constitute the littoral of North and South America for thousands of miles along the coasts of California, Mexico, Peru, and Chile. There are but few natural harbours along this immense coast-line, so different in character to the Asiatic and European contours in this respect, and the really important havens in a length of five thousand miles may be counted on the five fingers of a man's hand. There are few quiet inlets, estuaries, or sheltered bays, such as mankind loves for his maritime trafficking.

If we cross these deserts, it is but to encounter the stern and inaccessible ridges of the Cordillera, the great mountain chains of North and South America which parallel the Pacific throughout these many thousand miles, and which Nature has broken down only here and there to form passes to the interior. Modern man has sown a few harbours and cities along this great littoral, and cultivated a few valleys where rivers run down to the sea from this mountain chain, but otherwise Nature reigns supreme, and even these few oases of humanity are overtopped by volcanoes and menaced by earthquake and tidal waves.



The ice-age and the fire-age are both at work still. A belt of craters in one place does but give place to a zone of glacier-bound peaks, and both are carving out the land, often to man's detriment.

If primitive civilisation did indeed approach the twin-continents of America from the sea, it would have found at first sight little to allure it, to invite to the founding of a new home: and we may ask if the peoples of Alaska and British Columbia had any connection with those of Mexico, or if the inhabitants of that land—the Aztecs and others—had anything in common with those of Peru and the other Andine countries, and this is later discussed. Even in these days of steamships British Columbia and Mexico know little of each other and nothing of Peru and Chile.

In assuming the name "Secret of the Pacific" for this thesis, we shall, of course, not lose sight of the fact that some of these centres of ancient civilisation were not upon the Pacific slope or littoral. Some, such as part of the Yucatan remains, are upon the Atlantic side, or midway, upon the water-parting of the continent. All, however, seem traceable to an origin from or via the Pacific side. The great centre of pre-Hispanic civilisation in Mexico, that of the Aztecs, Toltecs, and others, was upon the great central tableland, the land of Anahuac, with its series of great lakes. The Mayas, whose was perhaps the highest civilisation attained in North America in pre-Columbian times, were disposed in the

singular peninsula of Yucatan, which juts out towards Europe, and in Central America, upon the water-parting and Pacific drainage area. In South America, the seat of the Incas and their forbears was upon the great plateau of Titicaca in the Andes, more than 12,500 feet above sea level, and divided from the Pacific by one of the main ranges of the Cordillera. Nevertheless, the Inca Empire was altogether a Pacific State.

These two great centres of early American civilisation, Mexico and Peru, are more than three thousand miles apart, as regards their capital cities; the whole of Central America, the Panama Isthmus, and the north of South America intervening. These are regions of so mountainous and inaccessible a character, in great part, as are scarcely encountered in any other part of the world, and I retain vivid impressions of journeys made in traversing them. Burning desert plains, over which the wearied horseman toils from sunrise to sunset, broken foothills, deep ravines, dense forests, rapid and treacherous rivers, which empty their torrential courses suddenly into the sea without estuary or bar, precipitous mountain passes overhung by glaciers, where the trail at times lies across the perpetual snowcap, and vast dreary, treeless *punas* or high tablelands, where the rarefied air of great elevation reacts painfully upon the traveller's heart and lungs. Mules, Indians, mosquitoes, heat, cold, snow, rain, hard fare, sunburn, snow-blindness, mountain-sickness, semi-starvation, fever—all these the traveller must experience in

the rugged lands discovered by Cortes and Pizarro, and there are few of these incidents of travel with which I have not made some acquaintance, in the more remote regions.

For the sake of rapid comprehension, the following list of the main centres of these old civilisations of North and South America may be studied. In the first column appear the names of the country or State ; in the second the names of the former cultural people inhabiting them :—

Country	Culture.
Alaska ... ..	} No stone-shaping arts.
British Columbia ... ..	
Oregon and Washington ... ..	
California, Colorado ... ..	} The Cliff Dwellers, Irrigationists, &c.
Utah, New Mexico ... ..	
Arizona ... ..	
Mexico ... ..	Toltecs, Aztecs, &c.
Yucatan and ... ..	} Mayas, Quiches, &c.
Central America ... ..	
Columbia ... ..	} Possible fusion between Maya and Inca culture.
Ecuador ... ..	
Peru ... ..	} Incas and pre-Incas, &c.
Bolivia... ..	
Chile ... ..	

Those people who practised stone-shaping arts or building of stone structures, it is seen, cover a vast zone of territory, extending from north to south over 70° of latitude, or nearly five thousand miles. The two most famous centres at the time of the Conquest, those of Tenochtitlan, as Mexico City under the Aztecs was termed, and Cuzco, the ancient capital of the Incas in Peru,

are, as stated, some three thousand miles apart. When we recollect, as before remarked, that the distance from the Euphrates to the Nile or from Chaldea to Egypt is only a thousand miles, we shall grasp something of the enormous distance over which the pre-historic American civilisation appears to have filtered. To traverse the relatively flat land, moreover, between the Euphrates and the Nile, such as was the theatre of the migrations of Abraham, would be a simple matter in comparison with an exodus along the rugged and inclement region of the Cordillera of North and South America, or, indeed, along their barren coasts.

To-day the tide of travel grows apace, and it may be that the opening of the Panama Canal—predicted for 1915—will encourage the development of this mighty coast region and of the American Pacific countries in general. But it will be inevitable, for a long time yet, that the traveller will be thrown very largely on his own resources—and in this will lie its charm to the adventurous. There are no fashionable tourist resorts, routes are not mapped out nor hotels recommended in these regions, nor are liveried guides and interpreters attendant upon the foreigner as in the beaten tracks of the Old World. Of course the Pacific slope of the United States offers all that can be desired in the way of convenience to the traveller, and in Arizona or California he will have little cause for complaint concerning his accommodation. Further, it forms a scenic wonderland, without peer, of its special kind.

In Spanish-America, however, which embodies all but a small part of the field, things are very different, and a brief sketch of the people and conditions of those lands will be in order here.

Mexico is traversed by various railways, several main lines connecting the country with the railway system of the United States. These lines cross the great plateau of Mexico to the capital (elevation 7,500 feet) and are about four days' continuous rail journey from New York. This is, in the main, an arid region, although intersected by extremely rich valleys and irrigated areas, producing cotton, maguey, &c.; whilst, of course, the fabulous mineral wealth of Mexico, in gold, silver, copper, and all else, lies mainly in the mountains which bound or intersect this great central tableland. On the Atlantic and Pacific slopes there are a few lines of railway connecting the central system with the seaports, and southwardly from the capital the railway system is connected with the trans-isthmian Tehuantepec railway. The slopes and littoral regions are tropical in character, yielding every tropical and sub-tropical product. Speaking generally, the climate of Mexico is healthy, and, indeed, in many places can only be described as delightful. In the lower districts and in the tropical forests, however, malaria is a serious matter. Yucatan and the more southern States are not connected with the railway system of the country, and are reached by sea. As regards the conveniences of travel, these, away from the railways, are not to be expected, and the traveller

must take careful measures for his food, accommodation, and beasts of burden. As to personal security, bandits and highwaymen were practically eliminated under the Diaz regimen, and doubtless the later revolutionary disturbances will calm down in time. In the more remote provinces, inhabited by half-civilised Indians under petty local authorities, certain precautions must be taken, but, as a whole, the prudent traveller may journey throughout the whole of Mexico in security of life and property. The Mexicans of all classes are courteous and generally well disposed towards foreigners.

Yucatan is described briefly in the chapter dealing therewith. It is, of course, part of Mexico territorially, but merges in all other ways into Central America.

The separate republics forming this division of America are more or less alike in physical character. They offer a wide range of climate and topography, and of the things of the plant and animal world, due to their highland and lowland structure, consequent upon the mountain range which traverses them. Politically they are backward, and financially they are notorious in the London "Market" for inability to meet the interest on loans. They are reached by sea either on the Atlantic or Pacific side, and in some cases are traversed by railway lines between the two waters. They offer in many respects much of interest to the traveller who can put up with the discomforts which Spanish-American travel ever carries with it, and as to their people, their defects

are counterbalanced often by good qualities, to which fair consideration must be shown. This region is undoubtedly one of the richest parts of the earth's surface, as regards its wealth and variety of natural resources, and its development belongs to the near future.

The terminus of this region is marked by Panama, a centre now of general interest, and thence the great mainland of South America is reached, in Columbia and Ecuador.

These two countries must be regarded as still very backward in their political and economical development, although full of alluring possibilities. From Guayaquil a railway now reaches Quito, the equator-situated capital of Ecuador. Extremely rich in agricultural possibilities and mineral products are these countries, and much may be expected of them when the requirements of commerce lay earnest hands upon them. At present their resources have been little more than played with. Of course it is to be recollected that these countries are extremely mountainous in character and correspondingly difficult of access as regards the interior, whilst as concerns their eastern or Amazonian and Orinoco watersheds, much remains unexplored.

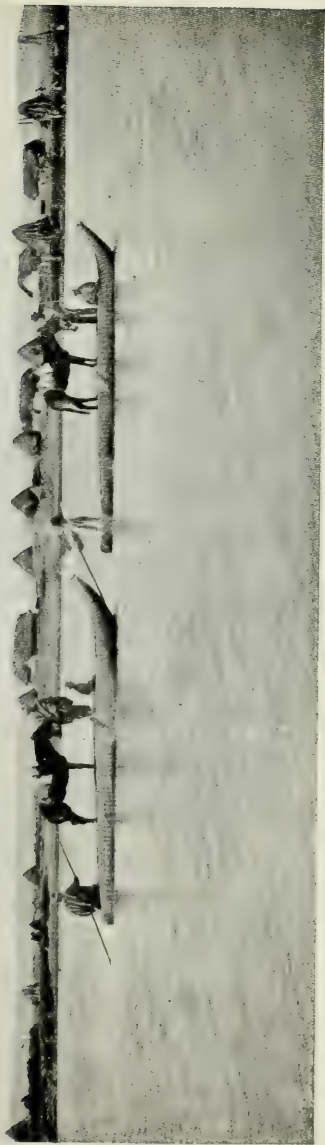
Peru, following on Ecuador, has a coast-line of more than 1,400 miles, and is described in the special chapters devoted thereto. It suffers, from an economical point of view, in that its interior is cut off from the littoral by the huge ranges, double and treble, of the Andes, which mountains in Peru and Bolivia come to their greatest

development. The existence of the Andes, however, is the cause of Peru's great wealth in natural resources, of minerals, &c., and other compensating circumstances. The people of Peru, the modern Spanish-American governing race, are intelligent but ease-loving, and although full of good intentions, are at times marked by a lack of sincerity in their commercial and political dealings, and inability to carry out the development of their great heritage. Two main lines of railway reach the interior of the country from the coast, crossing the Andes at great elevations; but so far they are isolated from any of the other railway systems of South America, and consequently the country is only to be reached by sea.

Somewhat similar conditions prevail in Chile, although the Chilians are a far more energetic and progressive race than their neighbours. This country, although of enormous length, is contained in the strip between the Andes and the sea, and does not extend beyond the mountains. Nevertheless, great mineral and agricultural wealth is possessed by Chile, and the only trans-continental railway in South America is hers, in conjunction with Argentina. The archaeological region, however, which we are called on to tread ceases in Northern Chile, extending little beyond the southern limits of the Titicaca plateau.

A few remarks upon more intimate matters of life and travel in Latin America may not be out of place here, written from the point of view of considerable experience of my own.





LAKE TITICACA, SOUTHERN PERU INDIAN RUSH RAFTS AND CONICAL HOUSES.



As soon as we enter a Spanish-American capital life takes on an atmosphere and colour which are not found elsewhere. We are amid a people more quixotic than ever were the nation of their forefathers of Spain. The air is full of personality and contrast. On every hand are presidents, generals, Cabinets, banquets, oratory, civil and military fanfare. Monuments of public heroes from Bolivar onwards, set amid palms and fountains, with a surrounding medium of men in top-hats and frock-coats, each a potential president or prospective or ex-Cabinet minister, and ladies whose outdoor apparel would in some cases outshine a Parisian ballroom ; sunshine and blue skies, the strains of music in shady Alamedas ; evidences of wealth, or pretensions of wealth ; literature and heroics, or pretension of such ; "liberty" and—no, not equality, for nowhere are the great gulfs of class so firmly fixed ; but all, whether reality, whether pretension, forming a picture which will not easily fade from the mind. If we are travellers of note or persons of importance in any sphere, this atmosphere will become intensified greatly. We shall almost despair at first of the courtesy and "correctness" of every one with whom we come in contact, whether it be the ceremony of entering a doorway, with its insistence on our precedence, whether the toast in our honour at dinner or lunch, mingled with flattering attributes which will bring the blush to the Anglo-Saxon cheek. Often these matters will fill us with genuine pleasure. The country is not all pretension, the bright smiles of women

not all conventional. Much of it arises from a desire to please, from the love of the pleasurable in life, and a desire to share it with us; from the strong trait of hospitality which is so pleasing a feature of Latin America, upon which the inevitable inroads of commercialism have now begun to tell. Above all, the fact that we come from a far-off land, and are of a famous race, will heighten the warmth of our reception.

The keynote to the character of the people of the Latin-American world is the word *caballero*. A caballero, as every one knows, is a gentleman, literally a horseman, which explains its philosophy and derivation. Every man desires to be considered a caballero. It is a legacy from his Spanish ancestry, a heritage of Don Quixote, at which we of the ruder Anglo-Saxon world will not scoff. The spirit of *noblesse oblige* which the Spanish Conquistadores bequeathed and the Spaniard of whatever class strives to uphold, is extremely grateful after the blatant discourtesy which too often is mistaken for equality in the United States, and to a less degree in the British colonies.

Notwithstanding what has been said earlier in this book about natural obstacles in these countries above and below the equator, the difficulties and dangers of travel in Spanish-America have often been exaggerated. Wars, revolutions, fevers, snakes, assassination, and highway robberies bulk largely in the mind of the prospective traveller—an obsession which has been unwarrantably acute. The experienced traveller,

in looking back upon his wanderings and sojournings in these lands, will find that two facts stand out in his memory. One is that the difficulties of travel in wild countries are really less than pictured before he attempted to overcome them. The other is that the necessity for carrying arms is in great part an illusion. The traveller who is a gentleman will find that his best weapons are tact and sincerity, straightforwardness and reserve. It has been claimed for the mariner that a special Providence watches over him, but the traveller in the wild places of the earth will find a similar philosophy capable of sustaining him.

No feature of Spanish-American travel stands out in the traveller's recollection more strongly than the mules, the *arrieros* or mule drivers, the mountain road, and all the lore and incident connected therewith. For in these generally mountainous countries railways are few; coaches or *diligencias* untrustworthy, and the sturdy and patient saddle-animals hold their own as means of conveyance of men and merchandise over thousands and thousands of miles throughout these mighty cordilleras and boundless river basins, forests, and plains. Indeed, it may occur to the traveller at times that the near future will carry us up to the epoch of air-journeying without an intermediary between the saddle and the aeroplane, in these inaccessible regions.

The popular idea of the climate of Spanish America is generally somewhat vague, like the popular geographical conceptions concerning it,

and it is usually pictured as a more or less torrid region. This of course is true for large portions of it, especially such as the coast of Brazil, the Isthmus of Panama, and the region bordering on the Gulf of Mexico. But in reality the range of climatic conditions is extremely varied, more so possibly, or at least as concerns South America, than any other continent on the globe. In those countries traversed by the Andes the traveller, within the span of a single day's journey may experience temperatures ranging from tropic heat to Arctic, or rather Antarctic, cold. It has fallen in the scope of my journeys on occasions to pass from semi-tropic valleys where oranges and lemons flourish to the bleak uplands where neither corn nor timber grows, and indeed to the limit of the perpetual snowfields, in the course of one day's ride. This matter of climate is naturally of importance in determining various conditions of travel, and the traveller, if he has not taken them sufficiently into consideration as regards his equipment, may suffer discomfort and inconvenience or possibly more serious results thereby. It is also to be recollected that in the higher regions of these mountainous lands such as on the great Mexican plateau or the high *punas* or tablelands of the Andes, the diurnal changes of temperature are very marked. These matters determine questions of clothing and equipment. Blankets under the saddle may always be carried; they both ease the burden on the animal and keep dry during storms. A folding cot and

a rubber cape are indispensable adjuncts in most regions away from railways, and for well-filled saddlebags of light food the traveller will often have occasion to return hearty thanks to Providence. All horse equipment is far better obtained in the country itself rather than taken from home. It is more suitable, and cheaper.

Thus it is seen how vast and varied is this New World of America, especially those regions that look towards the Pacific. What is to be its future? Is Europe to continue its colonisation and development, or will it be colonised—either under peaceful immigration or by conquest as time goes on—by the teeming millions of the Mongolian world of Asia? Such a development is not outside the range of possibility. Is the Spanish element which so far has peopled it too feeble to finish the work it began four hundred years ago? Will the European nations exhaust their powers of colonisation or reproduction in this epoch of rampant commercialism and “race-suicide”?

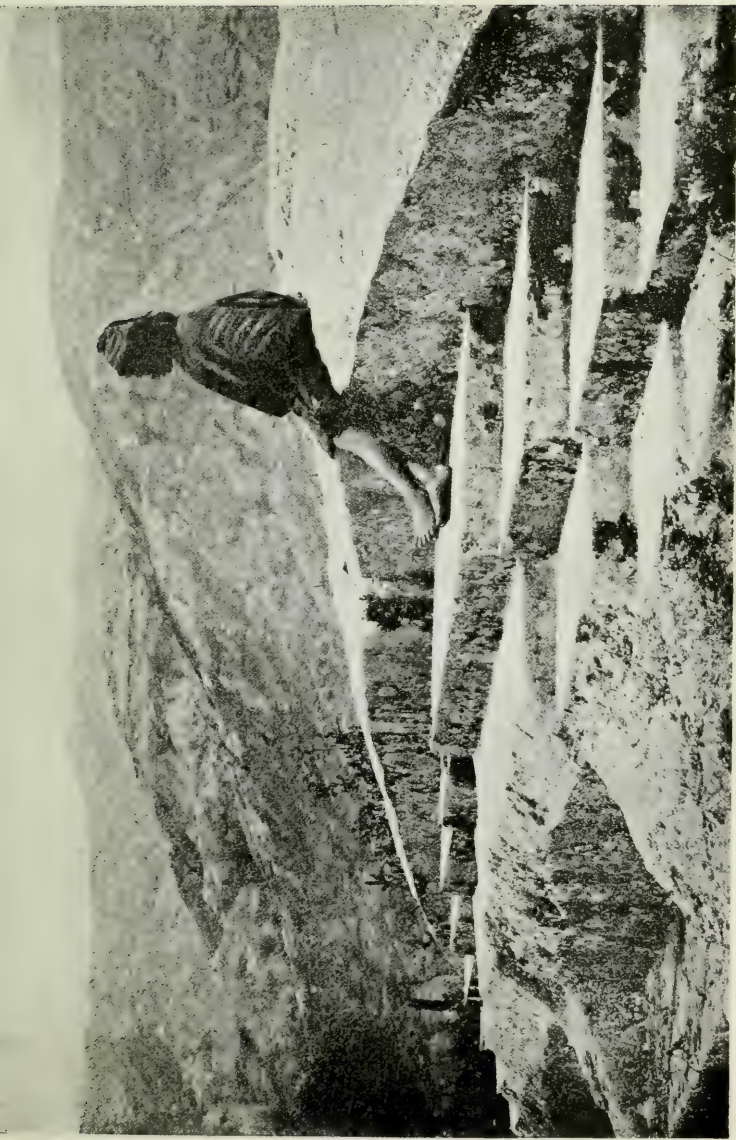
It is not within the scope of this work to enter into that question. We are concerned here with the past, and with the remains of ancient empires. Whether in South America or in North America where these old civilisations flourished, we shall constantly be reminded of the existence of former peoples. Here they lived, loved, wept, fought, died. Here are burial-mounds and mausoleums of departed populations, rock tombs and mummy cellars. Here are ruined hilltop fortresses, like castles of unreal romance, yet

stranger than fiction. In Inca kitchens, whose hearthstones were cold ages before Columbus sailed, my men have cooked the evening meal, whilst the winds murmured past outside and the wearied mules champed their fodder in the courtyard of some bygone Andine potentate.

In some regions we shall encounter abandoned settlements of *pueblos* and *gentiles* on every hand, community-houses and watch-towers set amid sandy desert or snow-crowned cordillera, regions where men dwelt in fear or security, where tribes and chieftains battled like those of the Holy Land for the possession of the soil, and where primitive sentinels watched vigilantly, perched on lofty cliffs, guarding the approaches to water-holes and fertile valleys. Here are mountain roads over which prehistoric Aztec or Inca postmen toiled—mail carriers in active working long before Europe dreamt of such a service, but which existed in Asia.

Our horses' hoofs will rattle among the fragments of pottery of a bygone people, whose skulls, bones, mummies will be our constant companions, and whose ancient temples and ghostly habitations will serve as our abiding-places.





THE "SEAT OF THE INCA," FROM WHICH THE INCA RULER AND HIS SUITE OBSERVED THE CONSTRUCTION OF THE  
FORTRESS OF SACSAHUAMAN, BELOW.



## CHAPTER IV

### NORTHERN STEPPING-STONES

The Eskimos—An important region—Behring Sea culture-area—A link between Asia and America—Language—Art—Mongol origin—Boats and navigation—The Aleutians—Customs and religions of the Eskimos—The road from Asia—Siberia—Neolithic man—The Hydah Indians—The Grand Trunk Pacific Railway—Bancroft's description—Hydah carvings—Totem poles—Canoes—Inter-continental navigation—The Nootkas—Native customs—The Apaches—California to-day—Behring Strait—The "Miocene Bridge"—Other early land connections with America—Passing reflections.

BEFORE entering upon the more interesting field that the civilisations of early Mexico, Peru, and Australasia offer, we must consider some humbler peoples who form links in the geographical and ethnological chain which, beginning at that interlocking fringe of Asia and America of Behring Strait, we shall follow around the rim of the Pacific Ocean.

The first people to occupy our attention are the Eskimos, those races which, dwelling from Greenland right across North America along the Arctic shores, extend into Asia across Behring Strait, and so positively are inhabitants of both continents.

The portion of America in its extreme north-

western point has been shown by recent investigations—particularly those carried on by the Jessup expedition of 1897 to 1902 in that region and among the aborigines of the Asiatic fringe of the north-eastern coast facing America—to be of great importance to the ethnologists. The study of this region, which may be termed the "Behring Sea culture area," reveals that there have been transmissions of culture from one continent to the other, and it is even stated that "the Asiatic Eskimo is of American origin, having come originally from his home beyond the Mackenzie river." At an early period these people interrupted the intercourse which existed between the Siberian and the Indian tribes, on their respective sides of the strait, an intercourse which has left cultural traits in this area in the fringes of both continents. In mythology, language, and certain arts, customs, and beliefs it is established that a unity of culture exists embracing the natives of North-eastern Siberia and the Indians of the North Pacific coast of America, and this fact is one of the most important which has been established in recent ethnological research.

The language of the Eskimos, with the variation only of dialects, is one from Greenland to Eastern Siberia, and differs entirely from the whole group of European languages. The Eskimos have not, of course, any literature, but they etch on ivory the subjects of their legends, and have a considerable folklore, in which they must be regarded as intelligent.

The Eskimos are separated by most authorities as a people apart from the American Indians, and are even regarded as "a distinct sub-race of the Mongolo-Malay"<sup>1</sup> by some. Indeed, a good deal of controversy has centred about the "Mongolian" origin, a supporter of which was the eminent Virchow. This subject is further discussed in a subsequent chapter. Formerly the inhabitants of the whole Hyperborean sea-coast, from the Mackenzie River to Queen Charlotte Island—the interior being entirely unknown—were denominated Eskimos, and were of supposed Asiatic origin.<sup>2</sup> This is borne out by later writers, one of whom considers that the Labrador Eskimos are "physically related to the Mongols of Asia."<sup>3</sup>

The boats of these northern people, in the region of the strait and of the Aleuts of the Aleutian Islands, are formed of a skeleton of wood covered with sealskins, and they carry fifteen or twenty persons, and in a storm two or three are lashed together. The small *kyak* is decked or covered with skins except the hole filled by the navigator, and no water can enter. Astonishing evolutions are performed by the *kyak* rower, who at will can turn his craft completely over in an aquatic somersault and right it with his paddle. Sails are used by the large

<sup>1</sup> Dr. Hrdlicka, "Handbook of American Indians North of Mexico."

<sup>2</sup> Bancroft.

<sup>3</sup> "Among the Eskimos of Labrador," Dr. Hutton, 1912, London.

boats, and the Aleutians put to sea with them in all weathers. Communications are constantly carried on between the natives of this fringe of Asia and America, and it is easy to see that prehistoric immigrants of whatever race or cult would have had little difficulty at whatever period in being ferried over from the Old World to the New. That such ferrying did occur in those periods when Asia "boiled over" it seems difficult to doubt.

Some of the customs of these northern savages are, moreover, sufficiently bestial to have been derived from those people whose doings brought down wrath upon Sodom and Gomorrah, or at least so they are described by Bancroft,<sup>1</sup> who quotes from numerous authors. Nevertheless they are not without religion, and they possess a native animism, embodying a vague belief in good and evil spirits, a heaven and a hell. Nominally, to-day they are nearly all Christians. Among their native religious rites is the "sun-dance." The Eskimo snow huts, made in blocks with courses inclining inwards to a beehive shape, are reminiscent of the adobe huts of similar form of the Indians of Lake Titicaca, in Peru; and, indeed, of such structures in stone in Asia Minor.

The road from Asia, that is, from India, China, Mongolia, which in imagination we might lay down for wanderers from those regions to have passed over on their supposed way to America—unconscious, no doubt, of their destination, and

<sup>1</sup> Bancroft, "Native Races," vol. i., p. 82, &c.

occupying unknown stages of time—might lie along the great plateau of East Siberia or possibly along the coast. The mountain ranges trend north-eastwardly, and this would seem to direct the line of least resistance towards Behring Strait. Indeed, the vast plateau of Central Asia stretches from the Himalayas to Behring Strait. The remains of Neolithic man are extremely plentiful upon the shores of the lakes which filled the depressions in the Lacustrine period. Numerous tumuli, furnaces, and other remains give evidence of a population much more numerous formerly. At the time of the great migrations in Asia from east to west it is probable that people were forced towards the northern borders of the great plateau, and from there pushed into Siberia. These people must have been forced still farther towards the barren north by succeeding waves of migration, where they “melted away,” it is stated. Numerous remains of the Bronze period are scattered all over Southern Siberia, of those early people who excelled in bronze, gold, and silver work, ornaments and implements often polished, which show considerable taste, but a people to whom iron was unknown. Their irrigated fields covered wide areas in the fertile tracts. It is not here asserted that these matters form links in the supposed Asia-American chain, but they bear upon it. The Siberian region is in great part unknown and invites fuller investigation.

A “striking physical likeness” has been spoken of as between the Lolos of the Upper

Yangtse, of Tibetan origin, and the North American Indian; which might "serve to link the plateau of Central Asia with the plains of North America."<sup>1</sup>

Behring Strait, which divides Siberia from Alaska—fifty-six miles of water broken by some small islands—is generally covered with fog; although the Siberian coast is visible from Cape Prince of Wales, the north-westernmost point of America, on clear days.<sup>2</sup> On the summit of this cape there are seen some "curious stone erections, moss-grown, dilapidated, and apparently of great age, tomb-like constructions or pillars of stone about 10 feet high, said to have been made by the Eskimos to represent men, and thus to deceive an enemy,"<sup>3</sup> which latter statement, however, is not vouched for. Possibly further discoveries in Alaska will bring to light other matters of interest concerning early building there.

Whilst we do not find stone monuments north of the culture area of the Cliff Dwellers of Arizona and Colorado, which we shall presently consider, some of the Indian tribes of the great north-west have their place here in considering the possible links between Asia and Mexico via the north. The Hydah Indians are probably the most noteworthy, originally occupying Prince of Wales Island, in Alaska, and Queen

<sup>1</sup> "Chinese Frontier of India": Archibald Rose, *Geographical Journal*, March, 1912.

<sup>2</sup> "Paris to New York by Land," H. de Windt.

<sup>3</sup> *Ibid.*



Charlotte Islands and the adjacent coast of British Columbia for one hundred miles inland, between  $55^{\circ}$  and  $52^{\circ}$  of north latitude. In this enormous region, so little understood by the ordinary reader, great changes are occurring. The seaport of Prince Rupert, the terminus of the new Grand Trunk Pacific Railway,<sup>1</sup> lies here, the great line whose opening is expected to precede that of the Panama Canal. Modern commerce will soon send its echoes resounding through this region of forest, fiord, and mountain, of which Bancroft<sup>2</sup> wrote beautifully, depicting that time when those peoples were least known to Europeans; when throughout the region of Columbia—that is, British Columbia and Oregon—

“Nature’s wild magnificence was yet fresh, primeval forests unprofaned, lakes and rivers, and rolling plains unswept; it was when countless villages dotted the luxuriant valleys; when from the warriors’ camp-fire the curling smoke never ceased to ascend nor the sounds of song and dance to be heard; when bands of gaily dressed savages roamed over every hillside; when humanity unrestrained vied with bird and beast in the exercise of liberty absolute. This is no history. Alas! they have none; it is but a sun-picture, and to be taken correctly must be taken quickly. Nor need we pause to look back through the dark vista of unwritten

<sup>1</sup> See my “The Great Pacific Coast.”

<sup>2</sup> “Native Races of the Pacific States of North America,” London, 1875.

history, and speculate who and what they were nor for how many thousands of years they have been coming and going, counting the winters and the moons."

With this last sentiment, however, it is rather our business to take issue. We are anxious to know what these and kindred peoples did throughout these thousands of years, and whence and how they came, and it is part of our principle here to think that all these secrets are parts of the mystery which time will reveal.

The Hydah people are described as tall, comely, and well-formed, not inferior to any in North-western America. In Vancouver's "Voyages," it is stated that, in the prominence of their countenance and the regularity of their features resembled the northern Europeans. Their complexion is pronounced "light when free from paint, and the women handsome, whilst the men grow moustaches sometimes as strong as those of Europeans." They built permanent houses in strong natural positions, one of which is described as accommodating seven hundred Indians. The buildings are often raised above the ground on a platform supported by posts, sometimes carved into human or other figures, in some cases 25 or 30 feet from the ground, and the fronts painted with figures of men and animals. Large images cut out of wood, skilfully joined cedar boards painted with hieroglyphics, two centre posts,  $2\frac{1}{2}$  feet in diameter, carved into human figures supporting two ridge-poles on their heads 12 feet



A TOTEM POLE, NORTH-WEST BRITISH COLUMBIA.



from the ground, are some of the matters noted by early travellers among these people, as quoted by Bancroft. The Hydahs are noted for their carved totem poles, as are the Tlinkits of the same coast, and for their skill in the construction of their various implements, particularly for sculptures in stone and ivory and slate carvings. "The supporting posts of their probable temples were carved into human figures and all painted red and black, but the sculpture of these people is superior to their painting," is the statement about them from Mackenzie's "Voyages." They were noted for the beauty and size of their cedar canoes and their skill in carving. "These canoes are dug out of cedar logs and are sometimes 60 feet long,  $6\frac{1}{2}$  wide, and  $4\frac{1}{2}$  deep, accommodating one hundred men. The prow and stern are raised and often gracefully curved like a swan's neck, with a monster's head at the extremity. Boats of the better class have their exteriors carved and painted, with the gunwale inlaid in some cases with otter teeth, and they are impelled rapidly and safely over the often rough waters of the coast inlets, by shovel-shaped paddles, and when on shore are piled up and covered with mats against the rays of the sun."

We see how navigation naturally develops among a people inhabiting an indented coast, as against that of an open surf-beat shore. The early Mexicans and Peruvians had no such canoes. Rafts and balsas, either of reeds or inflated skins, were their only craft, as described later. The same may be said for the whole

barren coast of California and, indeed, of Mexico. Of course, the Peruvians of the coast had no timber of this character, for the coast of Peru is treeless absolutely. This beautiful cedar of North America lends itself readily to working, as the traveller who has had occasion to build rafts to cross rivers in that part of the world will recollect. In the rivers that traverse the dense forests and swamps on the northern shores of Lake Michigan, I observed with interest the facility with which cedar logs were fashioned into rafts, secured with hardwood pegs, improvising a craft to cross the streams.

Fleets of the Hydah canoes engage in trade between the islands and the mainland, and it is not difficult to imagine that a people with such powers of coastal navigation might be allied with races who would have traversed Behring Strait, or passed along the natural stepping-stones of the Aleutian Islands from Asia to America. "One of these canoes easily distanced the champion boat of the American Navy, belonging to the man-of-war *Saranac*."

Of similar characteristics are the Nookas, farther south, and of Vancouver Island. Their boats were dug-outs from pine-trees, and held forty or fifty men. "The implement used for weaving differed in no apparent respect from the rude loom of the days of the Pharaohs." "They show themselves ingenious sculptors. They not only preserve with great exactness the general character of their own faces, but finish the more minute parts, with a degree of accuracy

and neatness" . . . says Cook, in his "Voyage to the Pacific." "The Indian mode of dancing bears a strange resemblance to that in use among the Chinese."<sup>1</sup>

The opening up of the great north-west of America, British Columbia and Alaska, will doubtless give an impetus to the study of these northern people and of the Eskimos, which latter, as stated, occupy the Atlantic seaboard from Eastern Greenland along the whole of the northern shore of America, and across Behring Strait to the Asiatic shore. Of the numerous tribes of the Pacific slope of America north of Mexico it is unnecessary to speak here. In Central California the poorest and lowest races of all existed, undistinguished by any arts save the most primitive. "Yet the most exquisite and artistic basketry in the world comes from an absolutely uncivilised tribe in California." It is to be recollected that this is by nature an arid region, timberless and largely waterless, where the raw material of life was scarce.

The cruel, treacherous, bloodthirsty, abominable, and thievish Apache, the veritable devil of those wild plains, inhabited the region immediately above, and partly within what is now Mexico. "This was a spot," said an old Indian fighter of the United States to me, as we journeyed along through that strange region of sand and sage-brush—not on horseback, however, but on the back platform of a Pullman car—"this was the spot where one of the early

<sup>1</sup> Bancroft, *ante*, who quotes from other authorities.

caravans was overwhelmed by Apaches, and men, mutilated and disfigured, were found staked out on the burning plains afterwards"—mutilated in that awful way which was known as the work of the Apache! Small wonder that this particular breed of "varmint" was hunted down and often shot on sight. "Here," says Bancroft, "it is that we first encounter thieving as a profession among these Western nations." When we regard the orange-groves, the flower gardens and pastures, the brimming irrigation canals, the elegant houses and motor-cars of the Anglo-American people who dwell in the transformed California and Arizona, we shall indeed mark the contrast.

How involved is the question of man's early existence in America is shown even in a very recent survey of the subject, which it will be well to quote here, although involving some repetition. We are reminded that "the absence of anthropoid apes from America, at any period of the world's history, clearly precludes the possibility of man's having originated independently in the New World." <sup>1</sup> It is argued that the population of America must have come from the Old World, and that as any land-bridge across the mid-Atlantic, or any connection of South America with the Antarctic continent could not have lasted until the human period, there remain only the two probable routes—of a farther extension of land between North America and Northern Europe on the one hand, and that of the Behring Strait land-bridge on the other. It

<sup>1</sup> "The Wanderings of Peoples," Haddon, 1911.





INDIANS OF VANCOUVER ISLAND.



is held that in late Tertiary times there was a land-bridge connecting North-West Europe with Greenland, and that the reindeer passed there-over during early glacial times. Some authorities maintain that this land connection remained until the glacial age had passed. Again, some authorities consider that until after the glacial period the Pacific was open to the Pole, that the far north-west of America had not yet risen from the waves, so that the Behring Straits land-bridge and the Aleutian Island stepping-stones would not have been there to help them. In that case "the first inhabitants of America certainly did not get there in this way, for by that time the bones of many generations were already bleaching on the soil of the New World."<sup>1</sup> Thus it is that even geology cannot give us a final word as to the existence of this "Miocene Bridge."

Of the early Norse immigration we have scarcely spoken. There is no doubt that this did occur. Dr. Alfred Russel Wallace supports this, amongst other authorities, and in one of his letters to me says: "The early Norse immigration, or a still earlier one, by which man entered America, perhaps accounts for the finer races of tall Indians, with long, flowing hair and aquiline noses, now almost extinct."<sup>2</sup> The recent comprehensive work of Dr. Nansen also discusses these early matters.<sup>3</sup>

The accounts of most of the northern tribes

<sup>1</sup> Haebler, "The World's History," 1901.

<sup>2</sup> December, 1911.

<sup>3</sup> "In Northern Mists."

of America, whilst giving place to their virtues and glimmerings of art and reason, are full of descriptions of abominable customs. In these sexual matters figure largely always; and the way in which many savage tribes mutilated and deformed the organs of their bodies, by perforating their lips, noses, and ears, and hanging heavy objects therein, is among the most extraordinary attributes of primitive life. It might seem to bear out the theory of some mythologists that there was a period in the world's history when all mankind was mad!

It is pleasing to turn from the people who dwelt in very temporary structures, and of very "unsettled" habits, to encounter races who at least built stone walls and, farther on, temples, although the reflection will not fail to occur to us how, all over the world, man could build the most exquisite structures of stone and yet be absolutely barbarous and bloodthirsty to his kind—customs, indeed, which have not yet disappeared from the world. With these reflections we approach the region of the Cliff Dwellers—a sort of preface to Mexico. We shall not forget, however, the enormous extent of the territory which, with these brief references, we have traversed from Behring Strait to the warm climate of these "aridian" cultures, a distance of some five thousand miles.

## CHAPTER V

### THE CLIFF DWELLERS

Western America—Colorado, Utah, and Arizona—California—The great American desert—The Rocky Mountains—Old and new civilisations—The Puyé ruins—Mesa Verde National Park—Remarkable structures—Unique situations—Subterranean chambers—Cliff temples and palaces—Connection with the Aztecs—Creation legends—Native story of evolution—The Pueblos—Pueblo pottery—Prayers for rain—Delta-lands—Prehistoric irrigation channels—The Swastika in America—Casas Grandes—Frontier with Mexico.

“FROM some remote and unknown ancestry there grew to being in the south-west of what is now the United States of America a people with certain attributes of civilisation, whose mural remains have aroused the intense interest of the archæologist.” These are the ruins of the famous Cliff Dwellers and prehistoric irrigationists encountered in certain parts of the States of Colorado, Utah, New Mexico, and Arizona.

Much has been written concerning these remarkable ruins and the people whose habitations they formed, and although nothing was known of the Cliff dwellings before the latter half of the last century, much light has been shed upon them by the scientific investigations

of recent years. The United States Government has taken an interest in their preservation and study, and some of the principal groups of ruins and the territories surrounding them are now held as national property. Further, the growth of settled conditions among the people of these States, formed from a constant influx of immigrants both from the eastern part of the Republic and from Europe, has caused these unique ruins to be held in value and preserved as objects of interest for the citizens of the American West. In fact, the region has become a national asset of some importance, and what was formerly an almost inaccessible desert is now easily reached by railway.

This part of the United States is of a character familiar to the traveller on the western slope of America, North or South. That is to say, it is a region of scanty rainfall, arid, consisting of vast stretches of desert broken by stony mountain ridges and deep cañons. These features alternate with valleys which, under the influence of irrigation and the science and energy of modern farming, have become centres of beauty and produce, to which the generally cloudless sky, dry climate, and wonderfully clear atmosphere add that peculiar charm which these regions possess, and which, once experienced, is never forgotten.

The early history of this part of the United States is a veritable romance. It is part of the Americas which became known by Spanish explorers and fell under the sway of Spain.

Indeed, it has retained, in every point of topographical nomenclature to-day, the romantic stamp of Spain. It was, however, the lure of mineral wealth and the fables of Golden Cities which drew the Conquistadores on. Of archæology they cared little; and it is due to their successors, the Anglo-Americans, that exact knowledge was obtained of the Cliff Dwellers.

It cannot be held to be out of place to consider this ancient culture area within the caption of the Secret of the Pacific. It is true that the region containing it is a long way from the Pacific Coast, but it is tributary thereto, the rivers traversing it being affluents, in the main, of the mighty Colorado, which drains the southern portion of the enormous arid basin of the "Great American Desert" lying between the Rocky Mountains and the Sierra Nevadas of California and Oregon. The Colorado, one of the most remarkable rivers in the world, after its two-thousand mile course, empties into the Pacific Ocean, or rather the Gulf of California, in Mexican territory; and to this great river and its Euphrates-like delta we shall have occasion to refer later.

Nothing impressed itself more upon me in this region than the way in which the new civilisation of the United States jostles the remains of these ancient peoples and of their successors, the Spaniards. There is no half-way house between the antique and romantic on the one hand, and the new—often brutally new—phase of American commercialism on the other. Here

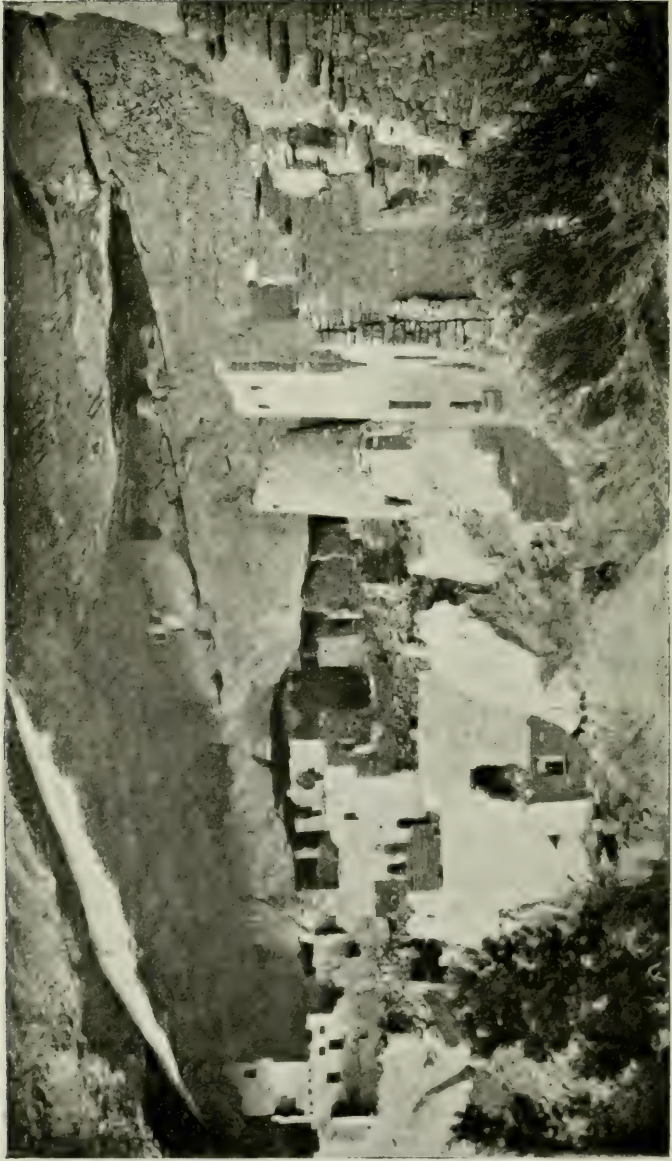
the modern American tourist or commercialist rubs shoulders with the blanketed and sandalled Indian. The rapid progress of a mechanical age is lapping the bases of these sandstone cliffs and ancient seats of a community no less industrious and worthy, perhaps, in its own time and way.

A glance at the map of that part of the United States shows that the boundaries of Colorado, New Mexico, Utah, and Arizona meet in rectilinear form just to the west of the Rocky Mountains; and within a comparatively short radius from this point the principal groups of ruins of the Cliff dwellings are situated. The traveller can approach them with ease by means of that remarkable scenic line the Denver and Rio Grande Railway from the city of Denver, capital of the State of Colorado, running southwards to Santa Fe, in New Mexico, and then westward, forming part of the general railway system of the United States.

The Puyé ruins are twelve miles from the station of Española, in New Mexico, and slightly to the south the Santa Fe line brings the traveller within twenty or thirty miles of Pajarito, Otowi, Tsankawi, Navawi, and Rito de los Frijoles. These important groups are now embodied in what is termed the Pajarito National Park. Still in the same State, at Aztec, upon a branch line, and about two miles from the railway, are the Aztec ruins, forming part of the immediate region of the great Mesa Verde National Park, containing the important Cliff dwellings of the Mesa Verde, best reached from Mancos Station, over







RUINS OF THE CLIFF-DWELLERS : CLIFF PALACE.

the border-line in the State of Colorado, in which this park is situated. The term "park," it is to be recollected, is employed simply to designate what has been declared a national or public possession. About forty-five miles from Dolores Station, also in Colorado, are cañons containing other groups of Cliff dwellings—the Holly, Yellow Jacket, Hovenweep, and Cannon Ball Cañons,<sup>1</sup> whilst 150 miles away from this station the singular natural bridges of Utah are reached, as also the Utah ruins.

The most important, and in some respects most remarkable, seat of these early inhabitants is the Mesa Verde. The Mesa (Spanish) is a tableland through which the Mancos River has carved a great cañon with numerous lateral ravines, and here ruined towns and buildings exist in situations so weird and remarkable as are scarcely to be encountered in any other part of the world. Round and square towers, community houses, walls and fortifications, subterranean chambers and sanctuaries, built under the roofs of mighty caverns carved by torrential erosion in ages past, form a spectacle unique in the world's archæology. Chief among these is the famous Cliff Palace of which an illustration is here given. The region of the Mesa is formed of a great sandstone strata, which has been eroded into these fantastic gorges and caverns, presenting from the distance a flat-topped tableland. The Mancos River, coming from the north-east, enters the cañon bearing its name and flows into

<sup>1</sup> See "Handbook of American Indians," Washington, 1907.

the San Juan River, a tributary of the great Rio Colorado.

The Pajarito plateau, a formation of vast age whose soft rock has been sculptured by the erosive action of wind and water into masses which may be described as geological islands, occupies an area of perhaps five hundred square miles on the west side of the Rio Grande, and on the tops of these mesas and in the faces of the cliffs are the remains of almost countless groups of the old Community Houses. Those on the mesa tops were typically arranged in quadrangles of four-terraced houses, surrounding a squarish court, which could be entered only by a single narrow passage-way. These quadrangular structures consisted of many rooms arranged in series, side by side, and also in terraces to the height of several stories. The great community house at Puyé must have been four stories high, and contained from ten to twelve hundred rooms, whilst against the cliffs below were built extensive villages that housed hundreds of people. The entire plateau from the Chama river south for forty miles, is covered with similar remains. The Cliff Houses alone, or rather the cliffs containing them, if placed in a single line, would extend for over one hundred miles.<sup>1</sup> The culmination of all the ancient Cliff cities of this region is to be seen in the Rito de los Frijoles. Here the ruins are built in a

<sup>1</sup> "Ancient Ruins of the South-West," E. L. Hewett, Archæological Institute of America; a pamphlet issued by the Denver and Rio Grand Railway.

cañon, 500 feet deep, but as difficult of access as the mesa fortresses last described ; and scattered along this gorge are fifteen villages. This ancient community bore the name of Tyuonyi, and its centre was the great community house, roughly circular, three stories high, in terraces, and containing originally eight hundred or nine hundred rooms, its inner court being entered by a single narrow passage. Another group of ancient towns is that of the Chaco Cañon in New Mexico—great houses, standing in the open, some five stories high, of sandstone blocks, in some cases arranged in courses of varying thickness so as to produce decorative effects. The best known of these unprotected structures is Pueblo Bonito, a huge building five stories high, semi-circular in form, its walls still standing to a height of over 40 feet. Other ruins surround it, all in the midst of a desolate plain of the Navajo Desert, almost devoid of water now, and incapable of supporting any population except wandering Navajo Indians. One of the greatest of these ancient ruins is that near Aztec, similar to that of the Chaco Cañon. This is a community house, which must have contained several hundred rooms in several stories, how many it is not possible to determine. Some of the rooms are still completely preserved, and floor, walls, and ceilings and fireplaces exactly in the condition left by their ancient dwellers, the timbers used in construction of the ceilings being in a perfect state of preservation.

There are other ruins of ancient towns almost

equally important in these regions. Many of these groups are worthy the name of towns and even "cities," for there must have been in them elements of collective order, of well-controlled community life and public interests with considerable populations. It is not a matter for surprise that these ruined towns, towers, round and square and subterranean sanctuaries, set amid these extraordinary cliffs and ravines should have been the theme of romantic and even absurd stories. It is not permissible to term the people who built these structures a "vanished" race, as it cannot be doubted that they were to some extent the forerunners of the present Indian people. As to the time of their building this is obscure, but the Cliff cities were in ruins at the Spanish advent. The date of their abandonment might be suggested as from eight to ten centuries ago, but even this is conjectural. The problem of their inhabitants' disappearance has not been solved. They differed anatomically in important respects from the present Pueblo Indians, being narrow-headed, whilst the latter are broad-headed, it is stated, and in the symbols and decorations on their pottery. As shown in an illustration later, the patterns on pottery in some cases embodied the "Greek" pattern, so freely encountered in Mexico, Central America, Peru, and in Asiatic and European regions. A device on another specimen of Cliff Dweller pottery, illustrated here, shows what might be an "astronomical cross." A large population must have occupied these regions in prehistoric times, judg-

ing by the great extent of the ruins ; places where to-day large communities could not be supported, as, for example, in the Chaco Cañon. Here, in the midst of a sandy plain, now waterless except for the very short rains of the summer season, are seen ancient irrigating ditches of considerable extent, indicating that, at the time of their construction, the climate must have been a different one. Indeed, geological evidence points to a slow drying-up of the whole southwest region, and doubtless a gradual exodus of these ancient people took place by reason of increasing drought—the story over again of ancient peoples in Mexico and Peru, and, indeed, in other parts of the world.

What is the connection, if such there was, between the Cliff Dwellers of Arizona and the culture of Mexico? There is considerable evidence, it is held by those authorities who have closely studied this field of interinfluence, of contact between them, and, indeed, of the early existence of some common source of origin of culture-factors. One of the principal authorities<sup>1</sup> on the ethnic history of Arizona, New Mexico, and the Pueblo culture area adjacent holds it to be probable that both Mexican and Pueblo cultures originated in Northern Mexico, developing as far as its environment permitted towards the north and the south. In the north it produced the Cliff Dwellers, in the south the advanced temple architecture of Mexico and Central America, hieroglyphs, and other adjuncts

<sup>1</sup> Dr. Fewkes.

of the Mexican civilisations. The same authority traces the great serpent cult of Tusayan, the "New Fire," and other ceremonials of the Pueblo peoples, as well as some of their fine handicraft, examples of which have been recovered from the Pueblo ruins, such as earrings and breast ornaments, whose workmanship equals that of the famous Mexican work, to the same source.

This great arid region of the south-western part of the United States, indeed, appears to have held some mysterious centre or dispersing-point for these early civilisations, or the ideas which motived them. It is to be recollected that the wandering tribes of the Mexicas who peopled the valley of Mexico, from the Toltecs to the Aztecs, came from some unknown place in the north. A suspicion might easily rise in the mind of the student, of some long-past, unknown arrival of cultured immigrants upon the American coast at this point: some voyagers from Asia, perhaps, who either by accident or design had crossed the ocean. This cannot be held to be the realm of pure speculation, and must be considered in conjunction with what has been said elsewhere as to the passage over the ocean of junks from Asia. Perhaps the "seven grottoes or caves" of the Toltec legend were seven ships!

As to the connection between Mexico and the Cliff Dwellers, it is stated that only one Pueblo language—the Moqui or Hopi of North-Eastern Arizona—shows positive relationship with the great Nahuatl tongue of ancient Mexico. There



was a linguistic unity between the civilised Aztec and the savage Shoshones and Ute family, some of whose offshoots wandered as far as Costa Rica, and even possibly to Panama, which "forms one of the most interesting ethnological facts in prehistoric America," according to authorities upon the subject.

Creation legends in considerable variety exist among the aborigines of North America, as indeed of South America, and some of these are mentioned together in a subsequent chapter. It will be well to include here, however, the striking Creation story of the Zuni Indians, one of the most remarkable among all the North American Indian legends. It is given by Cushing in the "Outlines of Zuni Creation Myths," and well summarised in the article in the last edition of the Encyclopædia Britannica which I quoted in another chapter. The principal figure is "Awonawilona," the "Maker and container of all," and the growth-substance the "fogs of increase" which he evolved by his thinking in the pristine night. The long story of the origin of the sun, the earth, and the sky, and the taking form of the "seed of men and all creatures" in the lowest of the caves or four wombs of the world, and their long journey to light and real life on the present earth is a wonderful story of evolution as conceived by the primitive mind: an aboriginal epic, in fact, says this writer.

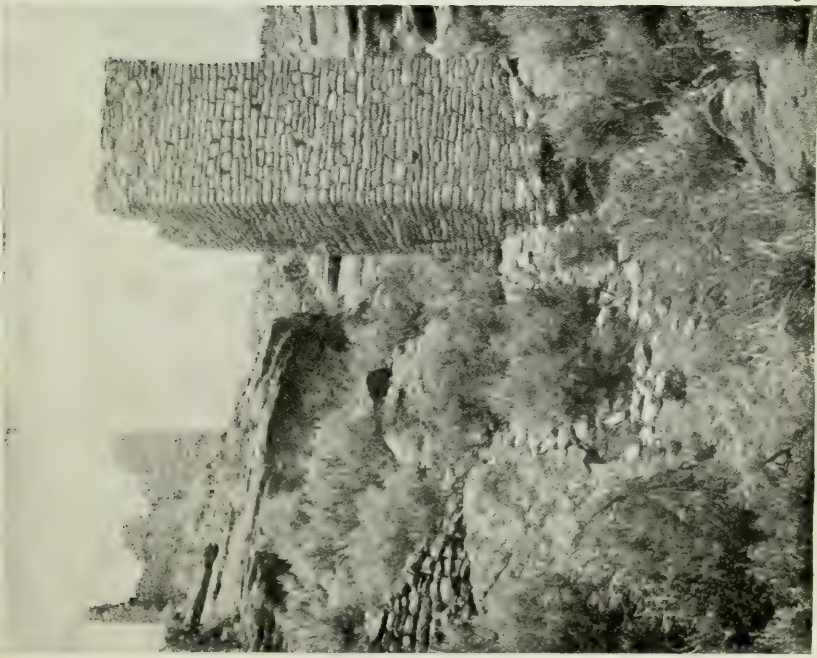
The Zuni or Pueblo Indians are those who occupy to-day the twelve Pueblos in New Mexico, and they are descendants of the Cliff

Dwellers whose remarkable handiwork we have considered in this chapter.

The mythology of the Californians was characterised by the absence, not only of migration traditions but of ancestor traditions.<sup>1</sup> Of their rites and prayers many were concerned with the need for rain: and that, indeed, might well be the supplication of the Western Americans, ancient or modern! Nothing in this region of Western America, from Arizona and Utah to California, impresses the traveller more than the dependence of the country upon water for irrigation; and the marvellous results secured thereby, in turning tracts of apparently arid and useless territory into fields and gardens bowered with profuse flowers and trees of every luscious kind of fruit, whose seeds or scions have been culled from every part of the globe, from Britain to Arabia.

The ancient delta-lands of the south-western region of the United States are of great interest ethnologically, for here a prehistoric people cultivated the land and made conduits for irrigating it; and a considerable population must have flourished there in pre-Columbian days. The first white settlers, forty years ago, easily distinguished the boundaries of these ancient fields, and the lines of the irrigating channels which long ago brought the life-giving fluid on to the thirsty land, and many of these remains are still to be seen. This region, drained by the great Colorado River and its tributaries, is indeed well

<sup>1</sup> According to Kroeber.



RUINS OF THE CLIFF-DWELLERS, SOUTH-EASTERN UTAH.



POTTERY FROM THE CLIFF-DWELLINGS.



termed the Asia Minor of America, and has in its physical characteristics and the regimen of its streams much in common with the Nile and the Euphrates. The river is silting up the head of the Gulf of California, much as the Euphrates has filled its delta throughout the ages. Here also—like Jordan—are streams, villages, and plantations, on tracts of land 250 feet below the level of the sea.

Mention must not be omitted here of the occurrence of the Swastika in this part of America. As the traveller passes through Arizona and New Mexico he will find offered for sale by curio-dealers these little luck-charms, whose form or symbol is of such world-wide occurrence. A discussion of the significance of the Swastika is given in a subsequent chapter. Some students have endeavoured to trace the original habitat of the American Indians by means of this symbol, which leads to every land almost, both in the Old World and the New, from Tibet, Persia, and China to Colorado and Peru; and especially is it looked upon as showing Buddhist connection or influence. In North America the Utes, Navajos, Pueblos, Pimas, Apaches, and others knew of it, and figured it on their robes. A good specimen of a prehistoric Swastika exists in the museum at Denver, Colorado, and on a bowl taken from the ruins of the Cliff Dwellers in Manco Cañon there are fourteen Swastikas depicted.

Before entering upon the Mexican culture it will be well to conclude here by noticing the

ruins of *Casas Grandes* — Spanish for “Great Houses”—which are in Mexico close to the American border and upon the railway from Ciudad Juarez on the frontier. They are pre-historic buildings of adobe and gravel, whose origin is unknown, as they were in ruins and abandoned at the time of the Conquest. The principal building extends for 800 feet from north to south and 250 feet from east to west, with walls up to 5 feet thick. These walls in places are 40 to 50 feet high and appear to have been of six or seven stories, with apartments varying in size from mere closets to large courts. Not far from this building are the foundations of a smaller edifice with a series of rooms ranged round a square court; whilst the whole district is studded with artificial mounds from which excavation yields stone axes, *metates*, or meal-grinders, and pottery of a much better character than the modern native pottery of the country.

From these regions of the south-west of the United States to the seat of the Aztec and pre-Aztec cultures is a great distance, nearly one thousand miles, with very fragmentary patches indicating the culture of prehistoric peoples. The northernmost stone monument in Mexico is at Quemada in the State of Zacatecas, and this seems to mark some frontier, real or imaginary, where the feebler civilisation of the builders of adobe structures ended and the more virile culture of the stone-building people began.

## CHAPTER VI

### EARLY MEXICO : TOLTECS AND AZTECS

Character of early Mexico—Bloodthirsty religion—The problem of its origin—The Toltecs—The famous god—Picture-writing—Early history—Mexican mural remains—The Teocallis—Stone of sacrifice—Awful women goddesses—Analogy with Babylon—Pyramids of the sun and the moon—Teotihuacan—Pottery and acoustics—Other pyramids—Cholula and Papantla—Remarkable structures of Monte Alban—The Zapotecs—Sculptured halls of Mitla—Ruins in Guerrero and Tehuantepec—Unexplored territory—The dawn of a literature—Mexican calendar—Aztec religion—The prayer of Nezahualcoyotl to the Creator—The “Unknown God.”

THE name of Mexico brings a vivid picture before the mind of the traveller who has sojourned in that romantic land, a land which possesses features so unique as to preserve to it an individuality and colour all its own.

As I write it I seem to hear the creaking of my sun-warmed saddle, and to scent the pungent odour of adobe dust, rising from white trails in an impalpable flour as my horse's hoofs stir it up. Here is the humble, courteous, cotton-clad peon, with brown face and sandalled feet, the “Hispano-Egyptian” denizen of the New

World as we may term him and perhaps not be far wrong.

Mexico is a land of thorny cactus and arid steppe, of fertile valley and succulent fruits, of prehistoric pyramid and temple set upon sun-beat plains or on precipitous ridges, or buried in the depths of tangled and impenetrable tropic forest. Mexico, where man has striven bloodily against his fellow-man till the very earth must cry to heaven for peace: bloodshed in sacrifice to awful gods before the Spaniard, with sword and cross, shed it more plenteously still, and afterwards as the jealousies of an evolving nation poured it out fratricidally.

It is not, however, a tale of blood that we desire to tell, but of a strange civilisation that flourished under the blue skies of Anahuac—"the land amid the waters," as Mexico was termed by its ancient masters—of which Europe knew nothing.

The beginning of history in Mexico is wrapped in fable and mystery. The Spaniards, when they reached this part of the American mainland from the West India Islands, early in the sixteenth century, found, not rude and simple tribes such as they had so easily overcome in the Antilles, but a warrior-nation who, but for the credulity to which their superstition gave rise, might have successfully resisted them. They found a system of civilisation, armies, law-givers, courts of justice, agriculture, and mechanical arts, astonishing to them and undreamt of, the civilisation of an organised people, dwelling in moun-



tain-surrounded valleys and impregnable lake-fortresses. But what surprised the invading white men most were the wonderful examples of this unknown people's stone-shaping art. They found an architecture of such elaboration and ingenuity as astonished the builders of Europe of that time, just as it continues to astonish the traveller to-day.

Here was a vastly interesting problem. Some of the Spanish writers <sup>1</sup> when they saw the great fossil bones found in Mexico, thought that the country had been peopled by giants from the Old World, before the deluge (just as it has been said of Easter Island and its huge stone statues, later described). Again, it was conjectured, due to the great number of native American languages, that a migration to America had followed on the famous dispersion after the Tower of Babel, and one Spanish writer <sup>2</sup> held that the early Mexicans must have been descended from Naphtuhim, Noah's grandson, who left Egypt—according to him for Mexico—after the confusion of tongues.

The splendid collection of the native traditions and examples of picture-writing printed at great cost last century by Lord Kingsborough, who spent a fortune to prove the supposition of a Spanish historian <sup>3</sup> that the Mexicans were the "lost ten tribes of Israel," has been of great value to archæologists, not by reason of the singular theory but from their preservation in his book, the "Antiquities of Mexico." But one

<sup>1</sup> Hernandez and Acosta.

<sup>2</sup> Siguenza.

<sup>3</sup> Garcia.

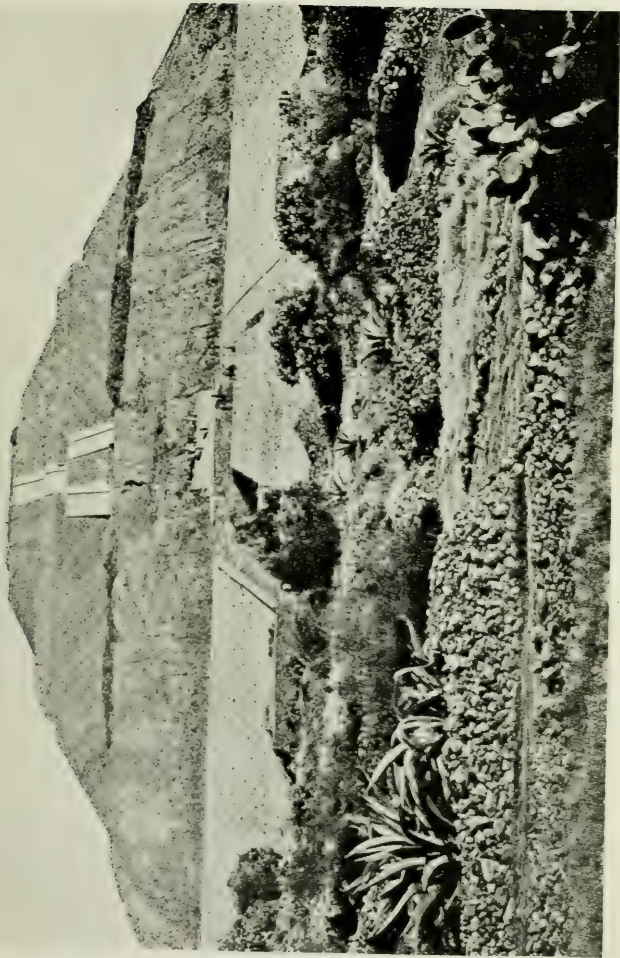
of the most valuable of native Mexican documents is the "Codex Chimalpopoca" which was discovered, interpreting the Mexican picture-writings.<sup>1</sup>

The Toltecs are the people to whom the greatest culture in prehistoric Mexico is attributed—a vague and shadowy people of whom we know very little. Their empire or dominion extended from the Atlantic side of Mexico, at Vera Cruz and Tabasco, westward to the Great Plateau, and even beyond towards the Pacific. Indeed, Mexican writers of to-day point to Toltec ruins upon the Pacific coast, especially at Tepic, which was a Toltec centre. The town of Tollan or Tula, however, about fifty miles north of the modern city of Mexico, is generally given as their principal centre.

Much discussion has centred about the Toltecs, and the assumption has been made that they were a distinct race. Another hypothesis is that they belonged to the Maya group, and it cannot be doubted that they represented a much earlier civilisation than the builders of Palenque, Quirigua, and Copan, the famous Yucatan and Central American ruins, later described. The Aztecs were, of course, subsequent to the Toltecs and undoubtedly adopted their civilisation, including their religion, architecture in part, and calendar.

The Toltecs were the builders of the great pyramids of Mexico, including Teotihuacan, near the present city of Mexico; those of Papantla,

<sup>1</sup> By Brasseur de Bourbourg.



TOLTEC PYRAMID OF THE SUN AT TEOTIHUACAN, VALLEY OF MEXICO.



Huatusco, and Tuzapan, in the State of Vera Cruz, and of Cholula. The famous calendar system is of Toltec origin, it is held, and also the art of picture-writing and the metallurgical and textile arts. Indeed, much fascinating lore surrounds the Toltecs, and associated with them is the famous Quetzalcoatl, familiar to all students of Mexican legend. Quetzalcoatl is described as a great deity, a god of the air, a saintly ruler and civiliser; in appearance like a white man; of noble features and precepts, bearded, and of another race, who came from the north out of the unknown, and, after dwelling for twenty years among the people, disappeared "into the Anahuac," the waters to the east, or the Atlantic Ocean. He left behind him the message that a race of white, bearded men like himself should come from the direction of the sunrise to rule the country. It was largely due to this prophecy and the credulity of the Aztec emperor Montezuma, consequent thereon, that when the Spaniards arrived they seemed to be the fulfilment of the prophecy, and so were freely admitted into the country. But it is not our purpose here to go farther into this history.

The picture-writing of Mexico was in daily use at the Spanish advent. It is to be recollected that the inhabitants of the coast made pictures of the ships, horses, and guns of Cortes and the Spaniards when they arrived at Vera Cruz; which were instantly dispatched by swift runners, by the system of post-relays in vogue in Mexico, to Montezuma in his stronghold of

Tenochtitlan beyond the Sierra Madre—the city of Mexico of to-day (see page 115).

The accounts of Bernal Diaz, Cortes, and others show that the Spaniards were vastly impressed with the evidences of wealth and advancement of the Aztecs, and even allowing for the inevitable exaggeration of men who wished to impress their monarch and stay-at-home countrymen, there is no doubt of the true impression they received. Readers of Prescott's inspiring work will be able to share this, but they must be warned that his accounts may seem in some respects highly coloured to the traveller who knows the country and has studied its probabilities.

The history of Mexico at the time of the Conquest, and prior thereto, is known with considerable accuracy, and is founded upon the accounts of Cortes and his companions, Bernal Diaz and others, also upon the writings of the Spanish-educated Mexican historian of that period.

The history of the ancient civilisation of Mexico and Central America is worthy of more respect than to be considered a mere record of the doings of savage tribes. In their ideographs the Mexicans so far approached real writing as to set down legibly the names of persons and places and the dates of events. These were valuable aids to the professional historian in remembering the traditions which were repeated orally from generation to generation. As it is, actual documents of native Aztec history, or copies of them, are available to-day to the student. After the

Spanish conquest interpretations of these documents and codices were drawn up in writing by Spanish-educated Mexicans, and more or less authentic histories were founded on them, with the aid of spoken traditions, by the Aztec-Spanish historians, Ixtlilxochitl and Tezozomoc. In Central America on some of the monuments rows of complex hieroglyphs are to be seen sculptured on the walls of ruined temples, and these probably served a similar historical purpose. Among the most remarkable documents of early America is the famous Popol-Vuh, or national book of the Quiché kingdom of Guatemala, which has been translated. This is described in a subsequent chapter.

The various nations inhabiting Anahuac, as the region of the Valley of Mexico and its approaches was termed, appear to have been detachments of some widespread race speaking the *nahuatl* language, which was the general tongue, and the native records and traditions represent these immigrants as having come "from the north," some place whose locality it is not possible to determine. The Toltecs were the first to arrive, and tradition has it that they ultimately became disseminated by drought, pestilence, and famine, and that the survivors migrated to Central America and Yucatan in the eleventh century. Other detachments or tribes followed at varying periods from the same mysterious northern region, and last of all were the Aztecs, whose finding of a site for a city is the subject of the well-known legend of the eagle, cactus, and

serpent,<sup>1</sup> still commemorated on the Mexican coins. The history of Mexico and the legends connected therewith are of fascinating interest, but it is not the purpose to dwell thereon here. The city the Aztecs founded about 1325 was called Tenochtitlan, and was upon the site of the present capital. It was in great part destroyed by Cortes and his Spaniards after the fearful conflicts at the time of the Conquest.<sup>2</sup>

The accounts of the magnificence of the Aztec capital by the Spaniards were undoubtedly highly drawn. It would have been impossible for Cortes and his men to have destroyed the place so completely if it had been of the solid character described by them, and there is no doubt that only the principal buildings were of stone, the inhabitants dwelling in adobe or wattle huts. Nevertheless, those buildings and monuments which were of stone were a sufficient basis for the Spaniards' surprise and admiration. The principal palace of the Aztec Montezuma, who was reigning at that time, consisted of "hundreds of rooms ranged round three open squares, of such extent that one of the companions of Cortes records having four times wandered about till he was tired, without seeing the whole."

It is worthy of remark, in passing, that this kind of ground plan to some extent characterises the Inca ruins of Huanuco Viejo, in Peru, which are described elsewhere, and of other Inca ruins.

No vestiges of this great palace remain to-

<sup>1</sup> See illustration in my "Mexico."

<sup>2</sup> See my "Mexico."



day, except it be in the portions of massive foundation occasionally unearthed. Similarly has the great *teocalli* disappeared which occupied what is now the main plaza of the capital. This, the great pyramid of the bloody War God Huitzilopochtli, was of rubble cased with hewn stone, measuring 375 feet by 300 feet on its base, and rose steeply in fine terraces to a height of more than 75 feet. The Mexican idols—huge sculptured blocks—are to be seen in the museum to-day. These pyramid-temples, the *teocallis* or gods' houses, "rivalled in size as they resembled in form the temples of ancient Babylon,"<sup>1</sup> and they were encountered and still exist in various parts of Mexico. Carved "serpent walls" surrounded the great *teocalli* of the capital.

The pyramids were truncated, the summit platform forming the site of a temple, and during the religious performances a long procession of priests and victims was seen by the populace below winding along the terraces and up the corner flights of steps. On the summit platforms of these pyramids there stood three-story tower temples, in which, upon the ground floor, were the stone images and altars. Before the image of the War God stood the sacrificial stone, here illustrated, which the traveller may see in the museum of Mexico to-day. This stone was curved so as to bend upwards the body of the victim in order that the priest might more readily slash open the breast with his obsidian knife. The heart was then torn out, beating, and held

\* Encyc. Brit., "Mexico."

up to the god, while the captor and his friends waited below the pyramid for the body to be thrown down the steps. This they took home to be cooked for the feast of victory. These abominable shrines reeked with the stench of slaughter, and in them the eternal fires were burning. Upon the platform outside the temple stood the huge Aztec drum, its parchment formed of snakes' skins; and when beaten its fearful sound was heard for miles. The ascent of Cortes to this pyramid—that of the capital—was dramatic in the extreme.<sup>1</sup>

Perhaps the most impressive object of the Aztec culture remaining is the image—of appalling aspect—of the “Goddess of the Dead,” a horrible monster which it is supposed was placed on the altar of the great Teocalli of Mexico, which Cortes and the Spaniards destroyed. It was found in the great plaza or square of the city of Mexico, where the Teocalli or pyramid-temple stood, and is now in the Mexican National Museum. It was an emblem of the Nahua theogony, in form of a woman, the head formed of a union of two serpents, the arms of serpents, and clothed in a *saya* or skirt of serpents. On the breast of the other side of the image also are sculptured four human hands, and it is supposed this idol represented the Goddess of War, who took the souls of those lost in battle, the mother of Huitzilopochtli, the bloody War God of the Mexicans. This astonishing and repulsive figure is sculptured out of hard trachyte,

<sup>1</sup> The fullest account of these matters is in Prescott.





THE AZTEC STONE OF SACRIFICE.

and is  $8\frac{1}{2}$  feet high. The back of the figure is shown in the illustration (see frontispiece).

The famous sacrificial stone is also of trachyte, 8 feet 9 inches in diameter and 2 feet 10 inches high. In the centre is a small cavity with a groove running therefrom, in which ran the blood of the human victims ; and there are marks on the stone made by the hackings of the obsidian knives used by the priests in these horrible sacrifices, as before described. Around the side of the stone are beautifully sculptured figures, representing probably matters connected with the Aztec cosmogony, having some similarity with those of the Calendar stone.

The Mexicans were a military people—militarism based upon their religion, and they were indeed “bloody-minded” people. Their military organisation was in some respects equal to that of Asiatic nations. The Mexicans played a ball game, and tennis, in specially constructed courts, using an india-rubber ball. Probably this was the first rubber ball seen by Europeans. They had also a favourite, complicated game called *patolli*, remarkably similar to the *pachisi* of modern India, it is stated.

The mural remains of the early Mexicans as they exist to-day are of great extent, variety, and beauty, and are found over an enormous range of territory. A mere enumeration of them occupies thirty odd pages in the Handbook of American Ethnology. They include pyramids, temples, tombs, causeways, statues, fortifications, terraced hills, rock sculpture, idols, painted caves, canals, pottery, mummies, wells, &c.

The pyramids of Teotihuacan are formed of adobe and rubble. The pyramid of the sun is perhaps the most colossal prehistoric structure in America, 700 feet long on the base and nearly 200 feet high. Upon its summit, tradition says, a huge stone image was set up to the Sun God Tonatiuh, whose breastplate of burnished gold flashed back the rays of the rising sun. The pyramid of the moon is a lesser structure, and there are other remains of a similar character near at hand. From one pyramid to the other runs a singular road known as the "pathway of the dead," bordered by ramparts of lava stones—some of which still bear the remains of painting in bright colours—and numerous small buildings which appear to have been burial-places.

The Pyramid of the Sun, of Teotihuacan, contains perhaps the secret of the most remote and advanced civilisations of Mexico, of the shadowy Toltecs who are the supposed constructors. Perfectly oriented, its principal side faces the east; and a knowledge of constructive necessities is shown in the immense solid platform upon which it is built, sustaining the pressure of the millions of tons of material upon it. In form it consists of four portions, one upon the other, with four faces terraced at the sides, and on the summit a terrace which doubtless contained the temple and the figure of the Sun God. It is reached by a fine wide staircase of stone, still in good preservation notwithstanding its age. It is not as high as the Egyptian





FIGURE OF OMECIHUATL, THE WOMAN GOD, FROM TEOHTHUACAN, CENTRAL MEXICO.



pyramids, but resembles them in its various coverings or layers and its stone construction to some extent ; and possibly it contains subterranean chambers. Enormous labour must have been expended upon it by the people of the valley where it stands.

Of extreme interest, as having been found at Teotihuacan, the "sacred city" of the Pyramid of the Sun, is the figure of another woman-god, that of Omecihuatl, here illustrated, also in the National Museum—the "Creator-Goddess," or possibly Goddess of Water ; and this has been compared by Mexican archæologists with certain Egyptian mythological figures. It is 10 feet 6 inches high, carved out of trachyte.

About the fields surrounding Teotihuacan hundreds of small terra-cotta masks and idols are constantly ploughed up, and many of them seem to be moulded as likenesses. Some of these much resemble the carvings and castings in stone and copper of the objects encountered in the tombs of the pre-Incas of Peru, although it would appear that the fact has been but little brought to notice. Both in Mexico and Peru these objects appear to bear, in some cases, a resemblance to objects from Egyptian tombs. Another point of similarity is in the form of the pottery of Mexico and Peru, in the finely-moulded bird and animal forms, the vessels having acoustic properties ; that is, when blown into, or when water is poured in or out of them, they emit sounds like the animal or bird they represent. It would appear that the similarity between the

objects of the pre-Aztecs and pre-Incas is stronger than that between the Aztecs and Incas themselves—a fact not generally recognised.

The great pyramid of Cholula measures 1,440 feet upon its base, and is larger than the pyramid of Cheops, and is the oldest and largest Teocalli in Mexico. Like most of these structures, it is truncated, its height being 200 feet, with an area on the summit of more than an acre. The hemispherical temple which crowned it is now destroyed and obliterated. It was reached by exterior staircases up the slope of the structure. This pyramid is ascribed to the Toltecs, and Quetzalcoatl was the presiding deity. The site of Cholula is 7,500 feet above sea-level. There is a Tower of Babel tradition about Cholula. One of the seven giants—Xelhua—rescued from the Deluge, the fable says, built the great pyramid to storm heaven from, but the gods destroyed it with fire and confounded the language of the builders.

Monte Alban, in the State of Oaxaca, has been well pictured by one of the best known writers on American archæology.<sup>1</sup> “Entire crests or mountains have been cut away to form platforms, courts, and quadrangles, high ridges thousands of feet above the valley, where pyramid after pyramid and terrace after terrace are encountered, like unreal or fairy cities shimmering in the haze, conveying a sense of mystery and unfathomed time which strikes upon the beholder’s mind. Utterly abandoned and solitary

<sup>1</sup> Holmes, “Ancient Cities of the New World.”

are these "high places" to-day, but the chain of Teocallis which existed there may be imagined, lighted up at night by the glare of sacred fires, never extinguished, whilst thronging multitudes pressed along the ancient streets." These "mansions in the skies" must have been made under autocratic mandate, generation after generation perhaps of struggling Indians under the will of Mexican Pharaohs, at whose commands, heedless of life, labour, and time, the stone, earth, and adobe of these pyramids were moved, and these mighty excavations formed on the Monte Alban hill.

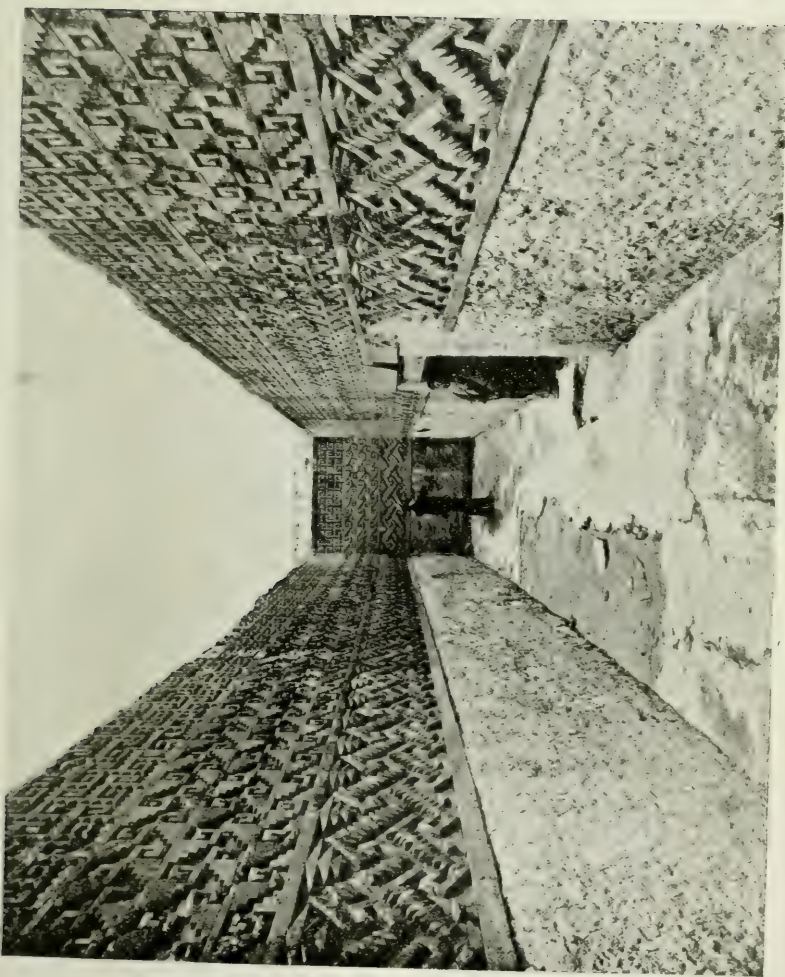
Others of the famous Mexican pyramids are that of Papantla, near Vera Cruz, ascribed to the Aztecs, and the smaller sculptured pyramid of Xochicalco. Papantla especially is one of those pre-Columbian structures which seems to have some affinity with the ancient world. Xochicalco is of much later date.

The State of Oaxaca is mainly peopled by the Zapotecs, a distinct racial group who have been the intermediaries, for an unknown period, between the Nahuatl civilisation of the Mexican plateau and the Mayas of Yucatan—a link between the east and west of these cultures. It is stated that "the influence of the two separate currents may be detected in the bastard calendar system no less than in the still undeciphered inscriptions."

The beautiful ruins of Mitla in this State, with their great monoliths and carved, sculptured walls and doorways, are still in a fair state of

preservation. Mitla was the burial city of the priests and kings of the ancient Zapotecs, and if partly analogous with the Mexican ruins they bear a distinct character. One of the main structures is the step-pyramid, 130 feet high, in three steps. But the principal architectural features are the monolithic columns and lintels and the richly sculptured walls and fretted façades of the palaces. These great halls or palaces are generally oriented, like some of the Mexican pyramids. The Hall of the Monoliths or Columns is a remarkable building 125 feet long, with a row of columns down its centre, whilst parts of the interior and exterior are carved with a beautifully executed geometrical design of "Greek" character. The blocks upon which the design is cut are exactly fitted to each other, and the walls of one of the halls show more than thirteen thousand of these. The stone doorways are massive and effective, with lintels in some cases 12 feet long and 4 feet thick. There exist at Mitla nearly a hundred monoliths, as columns, lintels, or roof-stones, some 20 feet long and weighing up to twenty tons. The large columns were cut from quarries in the tractyte formation five miles away and 1,000 feet above the level of the buildings, and some stones still remain in the quarry, never having been removed.

The name "Mitla" means the "Kingdom of the dead," also "hell"; and it is indeed a mystery, whose unknown builders have left no trace, of which no translated hieroglyph exists such as might afford a clue to the origin and



RUINS OF MITLA, HALL OF THE "GRECQUES," SOUTHERN MEXICO.



purpose of the beautiful halls, the sculptured façades, admirably executed mosaics, and strange subterranean chambers which form these astonishing ruins. The only hieroglyphics of Mitla are those in the subterranean temple of Tecotitlan—the place of the Gods—near at hand, which perhaps may yet be deciphered. These have been likened to Egyptian hieroglyphics. It is noteworthy that at Mitla there are neither idols nor sculptured figures of human beings. The whole ornament is of geometrical design, as if figures had been forbidden in the culture of its builders. The walls around the enormous concrete-paved courts forming the four principal temples are in some cases six *varas* thick. The whole of the immediate environs of Mitla contains remains of pyramids, fortresses, and underground chambers, all ornamented in the same way, and must have been the work of a people of very considerable civilisation. It has been surmised that they may have represented some religious sect, given over to meditation and the thoughts of death, perhaps with religious rites of a mysterious and awful nature. Some of the underground chambers are cruciform in shape, and lined with mosaics, and it is believed that further undiscovered subterranean halls exist. The ruins form perhaps the most mysterious and remarkable group in the New World.

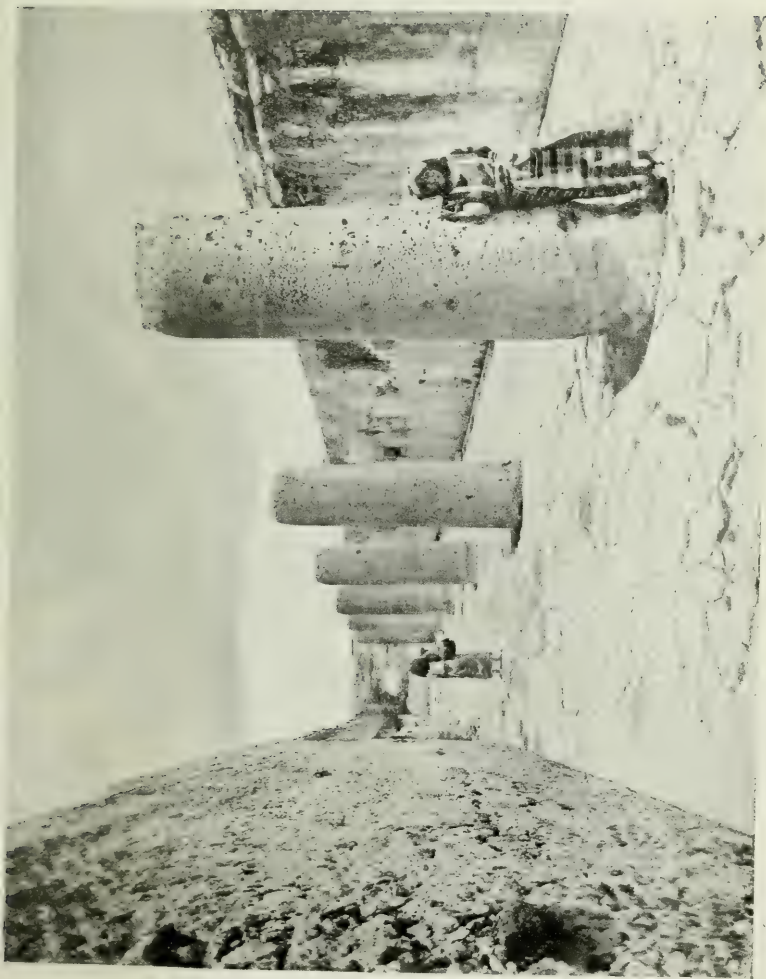
Mitla can easily be reached to-day. The new extension of the railway from Oaxaca and Mexico City brings one to within seven miles' carriage

drive of the village, and any one may visit these beautiful relics of a bygone civilisation without danger or discomfort. Their character is well shown in the accompanying illustrations; and, for want of a better name, one might term them "Mexican-Græco-Buddhist" in style.

The State of Guerrero, lying entirely upon the Pacific littoral, is a field of much ethnological interest due to the large number of distinct aboriginal tribes speaking different languages which inhabit it, but much of it is unexplored. Prehistoric ruins occur in considerable numbers, although not of a character such as distinguish the more famous Mexican groups. This region offers an interesting field for the traveller. There are no railways and the saddle is the only means of conveyance.

Tehuantepec is the isthmus State of Mexico, and here are the ruins of Quiengold, of considerable extent, including a fine "tennis-court." Tehuantepec is a region of much interest in many respects, both ethnic and physical. The women of the Tehuanas Indians are among the finest in Mexico of the native races, and are famous for their beauty and graceful carriage. Their native holiday costume is one of the most striking to be encountered among the aborigines of America. A railway now traverses the Isthmus from Atlantic to Pacific waters, 192 miles long, and has recently been linked up with the general Mexican railway system. The traveller may therefore reach this region without great difficulty, and the railway indeed may be looked upon





RUINS OF MITLA, THE HALL OF THE MONOLITHS OR COLUMNS.



in some respects as a rival to the Panama Canal.<sup>1</sup> The Isthmus of Tehuantepec may be taken as marking the boundary of Mexico in a physical and ethnological sense, although not politically, for the States and territories of Yucatan and Chiapas, which are considered under the Maya culture, to which they belong, are part of the Republic of Mexico.

As has been shown, the arts of the early Mexicans were far advanced in some respects, if extremely barbaric in others—a condition which was to have been expected. Probably the Aztec empire was near the dawn of a literature when the Spaniards overthrew it. Some phonetic signs were in use, but the picture-writing, or hieroglyphical representation in line and colour, on native paper was their means of record, supplemented by oral description. It is considered by the best authorities that the analogy of this important step towards phonetic writing with the manner in which the Egyptian hieroglyphics passed into phonetic signs is remarkable. These “devilish scrolls,” as the Spanish priests termed them, were diligently destroyed by a fanatic archbishop,<sup>2</sup> but some famous Mayan documents of this nature are preserved. The accurate adjustment of civil and solar time in a way superior to that of contemporary European peoples is pointed to as a proof<sup>3</sup> of early Mexican powers in mathematical philosophy, and their calendar system of some Asiatic influence.

<sup>1</sup> See my book “The Great Pacific Coast.”

<sup>2</sup> Zumarraga.

<sup>3</sup> Humboldt.

The beautiful and massive Calendar Stone of the Aztecs, or "sun-stone," is 12 feet in diameter, a monolith of basalt, the stone for which must have been brought by its makers from a considerable distance, as no rock of its character is found in the vicinity. Its sculpture is executed with marvellous dexterity and fineness, and with absolute symmetry, such as could not have been excelled by any ancient people. It was both a sun-dial and a calendar, such as the Egyptians and Chaldeans used in the most remote times. Upon it the Aztec priests told the time of day by means of gnomons and threads; but in addition to this the solstices were determined by these functionaries, and account kept of years and days. Further, on the face of the stone, as already mentioned, are inscribed the time or era of their civilisation, the division of the years in weeks and days, and the centuries, or series of years, computed with a greater exactitude than that of the modern Gregorian calendar, its error being equivalent only to a day in thousands of years. The central figure is that of Tonatiuh, and the hieroglyphic upon its forehead indicates the first solar cycle of fifty-two years. All the other carvings and hieroglyphics have been assigned their use in this astronomical wonder. It is almost impossible to understand how this stone could have been sculptured by workmen who had no steel tools; yet this and other numerous objects in diorite, granite, trachite, basalt, and other extremely hard rock, works of the early Mexicans, must have





THE AZTEC CALENDAR STONE.

been carved, as far as is known, simply with tools of hard stone. The reading of a hieroglyphic supposes this calendar stone to have been made in the year 1479 A.D. This, of course, is a very recent date comparatively, and the science which gave it birth—if it was not derived from Asia—must have taken enormous periods to evolve on American soil. If the Assyrian and Babylonian Zodiacal signs and the Hindu Zodiac are of extreme age, calculated astronomically as having their origin previous to 1800 B.C., and possibly 2300 B.C., the system of early America could not reasonably be considered to have been of recent origin.

In connection with the matter of a possible derivation from Asia, the article in the *Encyclopædia Britannica*, new edition, may be read with interest: "The Aztec calendar includes titles borrowed, not only through the medium of the Tartar Zodiac, but likewise straight from the Indian scheme, apart from any known intervention. The 'three footprints of Vishnu,' for example, unmistakably gave its name to the Mexican day Ollin, signifying the track of the sun," says this authority; and as to the widely-diffused Chinese circle of the animals "a large detachment of the 'cyclical animals' even found its way to the New World." The great authority on this subject was Humboldt, as before mentioned.

This famous calendar is further discussed elsewhere,<sup>1</sup> and the illustration given is from a photograph of the stone in the museum of Mexico.

<sup>1</sup> See p. 243.

A feature of the Mexican mythology was the Rain Gods, and the God of the Seas and Rivers, and the devotion shown to these is explained by the terrible droughts from which Mexico suffers, and which in all probability have been one of the principal agents in the dispersal and breaking-up of these ancient dynasties. A flood legend also is not wanting. The Toltecs, whose civilisation the Aztec family inherited, supposed, according to their chronology, that four thousand years after the creation of the world and seventeen thousand before the Christian era, Cyalchitlique, the god governing the seas and torrents, destroyed the earth, by upheavals and floods. In the curious picture writing of the Vatican Codex this cataclysm is represented, the god in the upper part of the drawing with angry visage presiding over man's destruction. The waves form furious whirlpools and inundate a house from which a head and an arm appear, indicating that all creatures died or were transformed into fishes. The two hieroglyphics shown in the illustration, serve to indicate the character of the Mexican picture-writing.

The religion of all the early Mexicans was not of the sacrificial and bloody character described before, and the pre-Aztec peoples, the Toltecs, have not been accused of these practices, whilst to the neighbouring empire—that of Texcoco, contemporaneous with the Aztecs upon the Mexican plateau—a chaste and in some respects beautiful religious cult has been attributed. The prince of this State, Nezahualcoyotl,



MEXICAN PICTURE-WRITING.



THE DELUGE IN MEXICO.



MONTEZUMA ORDERING HIS NAME TO BE SCULPTURED AT  
CHAPULTEPEC.

has been termed the "Solomon of Anahuac," due to his wisdom and poetic writings. He raised a "nine-story temple with a starry roof" to the "unknown God" or rather to the deity who was called Tloquenahuaque, "he who is all by himself," or Ipalnemoani, "he by whom we live," and who, like the Inca deity,<sup>1</sup> could have no image or likeness, but pervaded everything. In this temple human sacrifice was forbidden, and offerings of flowers were made. Part of the ruins of this edifice still exist, and upon the Texcotzinco hill, to bear witness that it was not all a fable, are the stone steps and terraces and the great embankment of the aqueduct-channel of hewn stone, which the traveller may see to-day. Baths and hanging gardens, temples, villas, and harems are said to have been established by this monarch, like those of some Oriental potentate, and, indeed, the story of his life is one of the most romantic of the New World's prehistoric heroes. Agriculture was practised under him, on hillside terraces, like the *Andenes* of the Peruvians, later described, and, indeed, there was much about his regimen that is comparable with the beneficent rule of the early Peruvian emperors.

But most eloquent of all is the prayer of Nezahualcoyotl as recorded by the Spanish-educated historian of that time, showing a mind capable of deep religious thought, like the Solomon of the Old World. This was his prayer:—

<sup>1</sup> See p. 174.

“ Truly the gods which I adore, idols of stone and wood, speak not nor feel ; neither could they fashion the beauty of the heavens, the sun, the moon, and the stars, nor yet the earth and the streams, the trees, and the plants which beautify it. Some powerful, hidden, and unknown God must be the Creator of the universe, and He alone can console me in my affliction or still the bitter anguish of this heart.” <sup>1</sup>

<sup>1</sup> See Spanish rendering of Ixtlilochitl in Prescott's "Mexico."

## CHAPTER VII

### THE MAYA WONDERLAND

The civilisation of the Mayas—Yucatan and Chiapas—Age of Maya culture—Arrival of Cortes—Types of architecture—Pyramids and galleries—The magnificence of Palenque—The beau-relief—Temples and crosses—The cross in prehistoric America—Yucatan millionaires—Henequen and oppression—Rubber and slavery—Ruins of Uxmal—The Maya Arch—Astonishing architectural forms—Chac-mol figures—Egypt and Mexico—Le Plongeon's theories—The mastodon in stone—Prehistoric hydraulics—The famous Cenotes—Sacrifices of virgins—Yucatan and the Ganges.

IF Mexico was a land of strange and sacred things, Yucatan and Central America, the home of the Maya culture, might well arouse our interest even to a greater extent. From among the forests and jungles of this remarkable region ruined temples and pyramids stand out like visions of some fabled story, wrapped to-day in dense vegetation, solitary and mysterious examples of man's abandoned handiwork.

What is now the great State of Oaxaca, in Southern Mexico, the home of the Zapotec and Mixtec tribes, was the merging-point of the two sharply contrasted cultures of Mexico and Central America, as was natural from its geographical position between them.





The region covered by the evidences of the Maya civilisation embodies the Mexican States of Chiapas and Yucatan, and extends thence into the Central American republic of Guatemala and others, as shown in a subsequent chapter. At what time did this culture rise, flourish, and fade?

It cannot be doubted that the civilisation of the Mayas was derived from an earlier system, and, indeed, was reared upon it, and this is the only rational view that can be taken. The life of the culture represented, however, by the existing famous buildings of Central America cannot, it has been calculated, have endured more than five hundred years. It is considered by recent authorities on the subject that its highest development was reached at the time of the Mexican or Nahua approach thereto, notably in Mayapan and Chichen Ytza, following which it became extinct. These must have been famous centres, known over vast areas, and this assumption is borne out by what scanty documentary records exist. Yet it is shown that the Mayan culture also tended to assimilate other elements, as shown in the types of its buildings.

In Bancroft's exhaustive work it is considered that the history of the Mayas "indicates the building of some of the cities at various dates from the third to the tenth century. There is nothing in the buildings to indicate the date of their erection—that they were or were not standing at the commencement of the Christian era. We may see how, abandoned and uncared for,

they have resisted the ravages of the elements for three or four centuries. How many centuries they may have stood guarded and kept in repair by the builders and their descendants we can only conjecture." <sup>1</sup>

It is to be recollected, as concerns the age of these ruins of Yucatan, that some of them at least were occupied when Cortes arrived; for it was in Yucatan that the Conquistador first landed, and if the life of the culture they represent is taken at five hundred years, it would seem that the civilisation responsible for them must have been roughly coeval with the Incas of Peru and with the Aztecs of Mexico. It is, apparently, the same story of a newer civilisation or culture founded upon and succeeding an older, as in the case of the Incas and Aymaras of Peru—a newer culture, but not necessarily an equal or superior one. The structures of sculptured stone bequeathed by this culture are perhaps the finest of all in the New World, and astounded Europe when they were discovered.

Some of the ruins of Central America represent the remains of entire cities which once flourished there, whilst others can only have been groups of buildings, and even single structures standing alone. There are certain well-marked types in these buildings, the commonest being pyramids and galleries. Some of the pyramids were built of brick, but the general construction was of hewn stone with a covering of carved slabs. Up the sides of these pyramids were stair-

<sup>1</sup> Bancroft, "Native Races," vol. iv.



cases, like the teocallis of Mexico, and some of them were built in steps. The platform on the summit was generally occupied by a temple, divided as a rule into two parts, vestibule and sanctuary. Altars, pillars, and sacrificial stones, as necessary for the rites and ceremonies practised there, were subsidiary parts of the structures. There were also dwellings for priests and officials; and the famous "tennis-courts" for the ball games like that of the early Mexicans before mentioned were a marked feature of these places. These courts were always built north and south, and almost invariably all the buildings have a definite orientation to the cardinal points. In some cases the pyramids form one side of a quadrangle, inside which are lesser pyramids, altars, and other structures. These astonishing buildings have been well described and illustrated,<sup>1</sup> and are as much worth a visit by the traveller as some of the famous temples of antiquity in other lands.

As to the galleries, the usual type is that of an oblong building with doors in the front, facing on the quadrangle or enclosure, divided into a series of rooms. In some cases these galleries, as far as their ground plan and the quadrangles are concerned, bear some similarity to the long halls built by the Incas in Peru. These, however, were of one story only, whilst the Central American galleries may have as many as three stories, the height and shape of the rooms being determined by the requirements of

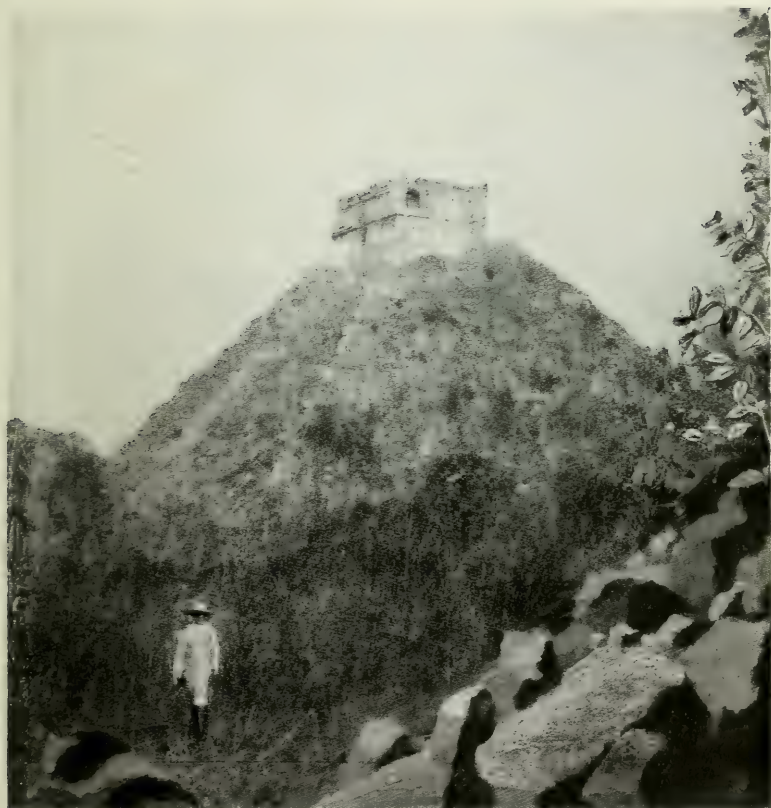
<sup>1</sup> See Holmes and others.

the vaulting. This vaulting, or "Maya Arch," is described later.

The principal groups of ruins of Maya character to be considered in this part of Mexico are those of Palenque, in Chiapas, and of Uxmal and Chichen Itza, in Yucatan.

At Palenque twelve truncated pyramids, built of earth, stones, and masonry, have been discovered, eight of which are crowned by temples. These are known respectively as the Temple of the Sun, the Temple of the Cross, the Temple of the Inscriptions, and the extensive group known as the Palace. It has been said that in the unequalled magnificence of its sculpture Palenque outshines all the other structures.

These temples are of massive masonry, partly rough blocks, partly of worked and sculptured stone and stucco sculpture. They have numerous doorways on to the platform at the summit of the pyramids, and are in some cases of an interior vault construction, carrying roofs of masonry. A square tower of four stories rises from the Palace group about 40 feet high, the centre of a system of extensive courts, buildings, and walls, all upon the summit of a low pyramid 200 feet square. The lintels over the doorways are, as in the case of the Yucatan structures elsewhere described, of wood, and the decay and failure of these has in some instances brought down portions of the façades. Interior staircases and huge reliefs of human figures are a feature of these interiors, and the beautiful figure known as the *Beau Relief* has been compared by some



PYRAMID TEMPLE AT CHICHEN ITZA, YUCATAN.



archæologists with the relief sculptures of Babylon and Egypt. A subterranean passageway, through which a stream still runs, of stone-vaulted construction, of which a thousand feet still exist, is a noteworthy feature of this prehistoric city. A dense growth of forest and vegetation covers these ruins, the whole valley, walls, pyramids, and roofs being buried in a leafy sea.

One of the largest and best preserved of all the structures here is that known as the Temple of the Inscription, so called by reason of the tablets it contains, carved with hieroglyphics. There are other sculptured slabs, which form balustrades to the steps leading up to the temple. The exterior is decorated with figures in stucco, those on the outer faces of the four pillars in front being of life size, representing women bearing children in their arms. It is perhaps worthy of note here that at the Temple of Cuzco, in Peru, as recorded by the early Spanish chroniclers, there were stone figures of women carrying children.

The small temple known as the Beau Relief is built on a narrow rocky ledge of the steep slope of the hill, and in a central position on the back wall of the sanctuary is the famous stucco bas-relief representing a single figure seated on a throne. This figure is beautifully modelled, both as to form, drapery, and ornaments, with the face turned to one side and the arms outstretched. A representation of this remarkable figure—which some have attempted to compare with Egyptian

or Assyrian work—has been preserved in one of the books descriptive of these buildings—fortunately so, as the figure is falling to decay.

The Temple of the Sun also contains figures and hieroglyphics, and calendar datings which are remarkable as showing some special combination of numbers and hieroglyphics which do not occur elsewhere. In the Temple of the Cross is a tablet which has excited controversy because its design contains a representation of a Latin cross. In connection with the occurrence of the form of the cross in Mexico, the crucified figure pierced with arrows, in the Mexican Codex, is also of interest.

All the above-described remains are in the State of Chiapas, which still contains an extensive range of territory but little explored. The same holds good as concerns the State of Guerrero, although these cannot be remains of such importance as those of Palenque, still undiscovered. There is, however, much to be done, and the traveller will enter a field of great interest and possibilities here. Leaving Chiapas, we enter upon the peninsula of Yucatan.

As stated, this remarkable region belongs politically to Mexico, although archæologically and ethnologically it is part of Central America. Geologically, too, it is very different to Mexico proper, and as our steamer lies off the coast we see at once that we are looking upon another land. Here are no sierras rising from sandy coast plains, topped by a snow-clad peak, like that of Orizaba from Vera Cruz, but a flat region

of plain and forest. The formation of Yucatan is a curious one—a great limestone plain, with its rivers running underground, and covered with forest.

Detailed study of the ruins in this part of Mexico has not been easy, due to the forests and swamp-growth, the malaria, encountered in places, and the backward state, politically, of the region. Here, perhaps, the modern Spanish-American rule has been more oppressive to the aboriginal element than elsewhere (unless in the Amazon rubber-bearing region),<sup>1</sup> and that is saying a good deal. Great fortunes have been made by the Mexican *hacendados*, planters of the henequen fibre; and, indeed, the henequen millionaire is the outstanding feature of social life in Yucatan; but in the creation of the wealth brutal serfdom has been involved and the trampling on the most primitive rights of the humble workers of the soil, the prime producers of the wealth. It would be out of place to dwell upon these matters here, and the reader may be referred to recent literature upon the subject.<sup>2</sup> It is easy to exaggerate these matters, but the whole of Spanish-American life, ancient and modern, has been an example of oppression meted out to the native, whether in Mexico, whether in Peru.<sup>3</sup> The atrocities which were recently exposed of a rubber company on the

<sup>1</sup> See p. 168.

<sup>2</sup> See "The American Egypt," also various recent magazine articles.

<sup>3</sup> See also my book "The Andes and the Amazon."

Peruvian Amazon bear witness to this condition. The *peon* or the *cholo* of Spanish America is little more than a chattel at present.

The ruins of Uxmal, the archæological pride of Yucatan, have been described by competent observers as one of the grandest groups of remains on the continent.<sup>1</sup> It is, however, situated in an extremely unhealthy district. The country is for the most part a great forest-covered plain, with a horizon level as the sea. The area covered by the main group of ruins is not much more than half a mile square, but scattered remains are found beyond this limit, and it must have been an extensive and important place. The buildings are now much dilapidated and covered with thick vegetation, except where recent clearings have been made. But they are extremely impressive, and "it is difficult to realise that the huge pyramidal masses, rising like hills above the general level, are really wholly artificial."

The five great structures or groups of structures at Uxmal, which are the finest specimens of Maya architecture, are those known as the Pyramid Temple of the Magician, or *Casa del Adonio*, the quadrangle called the Nunnery, or *Casa de Monjas*, the House of the Turtles, or *Casa de Tortugas*, the House of the Pigeons, or *Casa de Palomas*, and the Governor's Palace, or *Casa del Gobernador*. There are many other

<sup>1</sup> "Archæological Studies among the Ancient Cities of Mexico," W. H. Holmes (Columbian Field Museum, Chicago, 1895).





FIGURE DISCOVERED AT CHICHEN ITZA, YUCATAN.



buildings surrounding these, but of less interest and importance, principally because they are in a more advanced stage of dilapidation. There are certain features of material and construction common to nearly all these buildings. The stone is a pale yellowish and reddish-grey marbled limestone, which must have been quarried from the massive strata somewhere in the vicinity. The sites of these quarries, however, are buried in the dense jungles, and are hard to find. The body of the walls is formed of unhewn stone in mortar of excellent quality, made of lime burned in the vicinity. The facings and decorations are all cut and carved with dexterous skill, not surpassed even in work in which tools of iron and steel are used ; whilst the faces of the blocks and their contact margins are cut with absolute precision. The stones were bedded in mortar, but in some cases the joints are so well made that the mortar does not show on the surface. A great deal of plastering was used, and surfaces and even mouldings and sculptures were rendered with white plaster and painted in colours. The walls average 3 feet thick, and consequently are massive, and there are no windows or openings for air or light. The doorways are of simple construction, with lintels, where they remain, of zapote wood, a hard native variety, dressed square, measuring 8 feet long and 15 inches wide ; and many of these large lintels are in a good state of preservation even to-day.

On plan, these buildings generally take the

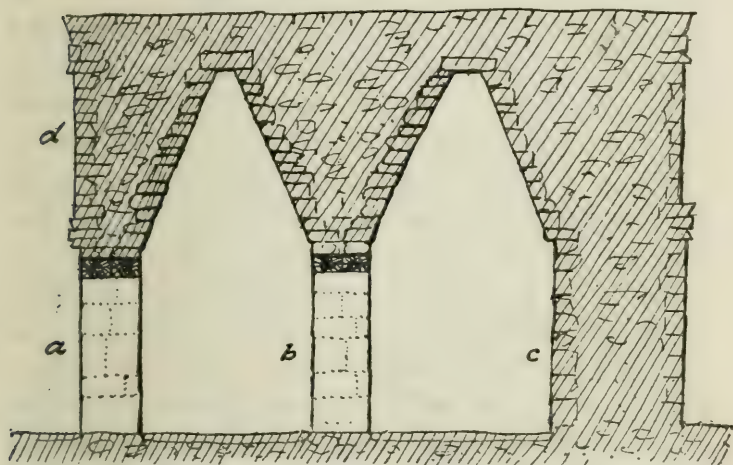
form of a rectangle, long and narrow, and having one or two series of rooms. None of them are over one story, but the remarkable roof crests give an effect of great height in some cases. The base of the buildings is formed of terraces or low pyramids.

As to the interior construction, this embodies the peculiar vaulted ceilings of stone, the wedge-shaped Maya "Arch." This, of course, is not an arch in reality, although termed so for convenience; but it consists of horizontally placed stones, successively corbelled out, bevelled to form a smooth slope, and spanned at the top by a larger slab: this type of construction is found, although in less degree, in Peru, and is, of course, a natural development of primitive stone-masonry.

The general structure of the apartments and vaulted ceilings is shown in the accompanying illustration, which is a section of the Governor's Palace.

Among the most remarkable ruins in the group is the Temple of the Magicians; and it is the first to catch the traveller's eye as he approaches from the trail. This structure consists of a steep step-pyramid with a ruined temple upon its summit; and upon the western face near the top is a second remarkable structure. The height of the pile is upwards of 80 feet, the length at the base about 240 feet, and the width nearly 160 feet. The summit platform measures about 22 by 80 feet. The interior of the mass is composed of rough stones in coarse mortar and the surface

was faced with rough-dressed stone, large portions of which are still in place. A wide stairway rises directly from the roadway on the east side, at an angle so steep that the ascent is made with difficulty and risk. The steps are much loosened and displaced, but as a whole the stairway is in a wonderful state of preservation,



TYPE OF MAYA ARCH OR VAULTED CEILING; FROM HOLMES'S "ANCIENT CITIES OF MEXICO."

- (a) Outer doorway, wood lintels restored.
- (b) Inner doorway.
- (c) Back wall, nine feet thick.
- (d) Entablature with rich decorations.

"considering the steep angle and the destructive agencies at work for upwards of four hundred years." The temple which crowns the summit is some 70 feet long by 12 feet wide. The arch-supported roof had fallen in when the above account was written, and the walls are broken down in various places, but some were still

adorned with chastely embellished lattice-work panels, unique sculpture, and masks of rare form.

The most striking feature of the structure is a temple built against the north side of the pyramid. The doorway opens on a narrow platform from which a stairway some 24 feet wide descended into the court below. The façade of this temple is about 22 feet square, and is a most ornate and vigorous piece of composite sculpture. The large space above the doorway is occupied by a colossal snouted face or mask some 12 feet square, filled with striking detail.

Another famous group of buildings here is the Nunnery Quadrangle, and this is among the best known specimens of Maya architecture, but "much as it has been described, and as fully as it has been illustrated by the drawings of Catherwood and Le Plongeon, and the photographs and casts of Thompson, the student must see it before he can begin to realise its marvels." Four great rectangular structures stand upon a broad terrace in quadrangular arrangement, their ornate fronts facing inwards upon the enclosed court. They do not have the character of temples, but rather of communal dwellings for bodies of priestly orders. The terrace upon which these buildings are placed has not been very clearly defined. The base measures upwards of 300 feet square; on the south it rises in three unequal steps to a height of perhaps 15 feet, on the other sides considerably greater. The four great façades facing the court are among the most notable in Yucatan, and deserve special attention

at the hands of students of American art. They have been carefully described by several authors. Bancroft's descriptions are especially full and lucid. Examining the various motives employed in embellishment, we find that the great snouted mask (or at least partially masked faces, probably symbolising the chief Yucatec deity Cukulcan) was the favourite and is found in all the fronts. Next to the mask design the most important motive is the serpent. The embodiment of the colossal feathered serpent with the complex field of geometrical decoration in the west façade is a most effective piece of work and must be regarded as a great masterpiece of decorative sculpture. Life-sized or colossal human figures, almost in the round, form a fourth group of motives, and several fragments remain to attest the skill and taste of the ambitious builders. It may thus be said that these buildings employ some eight or ten distinctive elements, nearly all of which are doubtless mytho-æsthetic, and were introduced because of their associated ideas, as well as for embellishment. They all occur in other buildings in Uxmal, and nearly all are found in Chichen and other cities of Yucatan.

The so-called Governor's House or Palace is built on a broad triple terrace, and this superb building is justly regarded as the most important single structure of its class in Yucatan, or for that matter in America. It is 320 feet long, 40 feet wide, and about 25 feet high. The building faces the east; the front wall is pierced by

nine principal doorways and by the two archway openings, and presents a façade of rare beauty and great originality. The House of the Turtles and the House of the Doves are also remarkable structures, the last named being a group of six galleries surrounding a court.

The foregoing descriptions of Uxmal are taken from Holmes's comprehensive works, to which the student may be referred for fuller detail and illustrations.

Scarcely less famous than Uxmal, and not to be confused therewith, is Chichen Itza, in the northern part of Yucatan, about midway between the east and west coasts.

These ruins consist of eight principal groups, which are among the most important and best preserved of any of the early American structures. They are grouped around two natural flowing wells in the limestone formation, the *cenotes*, famous in this remarkable peninsula. The larger of these wells is 350 feet long by 150 feet wide, and their rocky sides are 60 or 70 feet high. The Casa de Monjas is a three-story building, bearing traces of three distinct periods of construction; a small round structure—the Caracol—in imitation of a snail-shell; and El Castillo, an ornate temple on a pyramid of striking appearance, 200 feet on its base and 75 feet high, with staircases on all four sides. This temple is adorned with serpent-pillars of a kind found only at Uxmal and at Tula, near Mexico city. There is also an unnamed temple-pyramid, with a strange group of caryatid figures; also



a tennis-court, and lastly, the Temple of the Tigers, with extraordinary coloured reliefs representing figures of warriors, and hieroglyphs, all executed in a distinctively Mexican style. Another evidence of Mexican influence at Chichen Itza is to be noted in fine figures of the so-called Chac-mol type—that is to say, horizontal figures in which the arms are extended to the navel, which is indicated by a cup-like depression. The Chac-mol type is characteristic of such sites as Tlascala and Cempoalla.

These last-named places, it will be recollected, are on the Mexican gulf slope, and were among the first points on the mainland of Mexico visited by Cortes, who destroyed some of the temple-pyramids of the tribes dwelling there.

In considering the works of the Mayas it might well be asked what instruments of precision they possessed, to perform stone masonry so true and plumb and of such elaboration as excites our admiration even to-day—buildings which it would seem impossible to construct without scientific appliances.

Mention has been made of the singular theory advanced by one of the explorers<sup>1</sup> in Yucatan that Egypt owed its early civilisation to Mexico; and he set forth his theory in his books. The matter was recently brought before the public again in a magazine article<sup>2</sup> of which it is of interest to note some particulars.

<sup>1</sup> Dr. Augustus le Plongeon.

<sup>2</sup> *London Magazine*, April, 1910.

“ Whence did Egypt derive her civilisation? No one has yet succeeded in discovering a solution to the mystery. One fact is assured: the farther back research goes, the more complete is found Egyptian civilisation. It was not autochthonous; it was carried to Egypt. Who carried it? Various scientists have adduced theories, but none of them have any substance. Yet the key to the problem stares them in the face if they would but rid themselves of preconceived ideas. In Yucatan we find the key to the problem. In ‘The Greater Exodus’<sup>1</sup> we find the following: ‘On the ancient Egyptian monuments, especially those which refer to the campaigns of Sesostris, there are pictures which have never been explained in a satisfactory manner. These are of men with red skin, beardless, and wearing the headdress of the old Peruvian Incas.’

“ The architecture of the people of Yucatan was the precursor of Egypt and Babylon, their religion was passed from continent to continent, they built pyramids and had a wonderful system of letters. Le Plongeon died maligned, sneered at by self-constituted authorities who preferred to perpetuate a wrong rather than admit that the whole ideas of civilised man, which have passed muster for so many centuries, were put in the melting-pot by the genius of Le Plongeon and one or two able workers in the same field.<sup>2</sup> His

<sup>1</sup> Lee.

<sup>2</sup> Abbé Brasseur de Bourbourg. His work was valuable, but his interpretations are held to be fanciful.

discoveries at Chichen Itza, where he found the tomb of Chac-mol, or Prince Coh, are dramatic to an extraordinary degree. They associate Mexico with Egypt, Babylon, and other past epochs. Yet Dr. le Plongeon spent his fortune and died in poverty to advance a theory and a cause which he knew to be true, and he and his devoted wife spent their lives in exploration in Yucatan, and deserve the homage of the scientific world. To-day few libraries contain his works. It rests with the world ere too late to make amends to his widow. Let us know the truth, which for two thousand years has been denied us, and at which Plato hinted in his famous Dialogues."

Whatever view the reader may form of this, it is certain that much interesting matter was laid bare by the Le Plongeon. The explorer sought to trace in the remarkable sculpture on the frieze of the façade of the Nunnery or Casa de Monjas at Chichen Itza "an illustration which might serve as the account of the creation given in an ancient work of the Brahmins, the 'Manava Dharma Shastra,' compiled in 1300 B.C. from works of greater antiquity. But the letters inscribed are *ancient Egyptian letters*. The sculpture portrays an egg, surrounded with scallops, indicating rays, to demonstrate the sacredness of the divinity within the cosmic egg. The picture is enclosed in a frame of zigzag lines; symbolically this represents the egg floating in the midst of the waters.

"The letters M.H.N., forming part of the

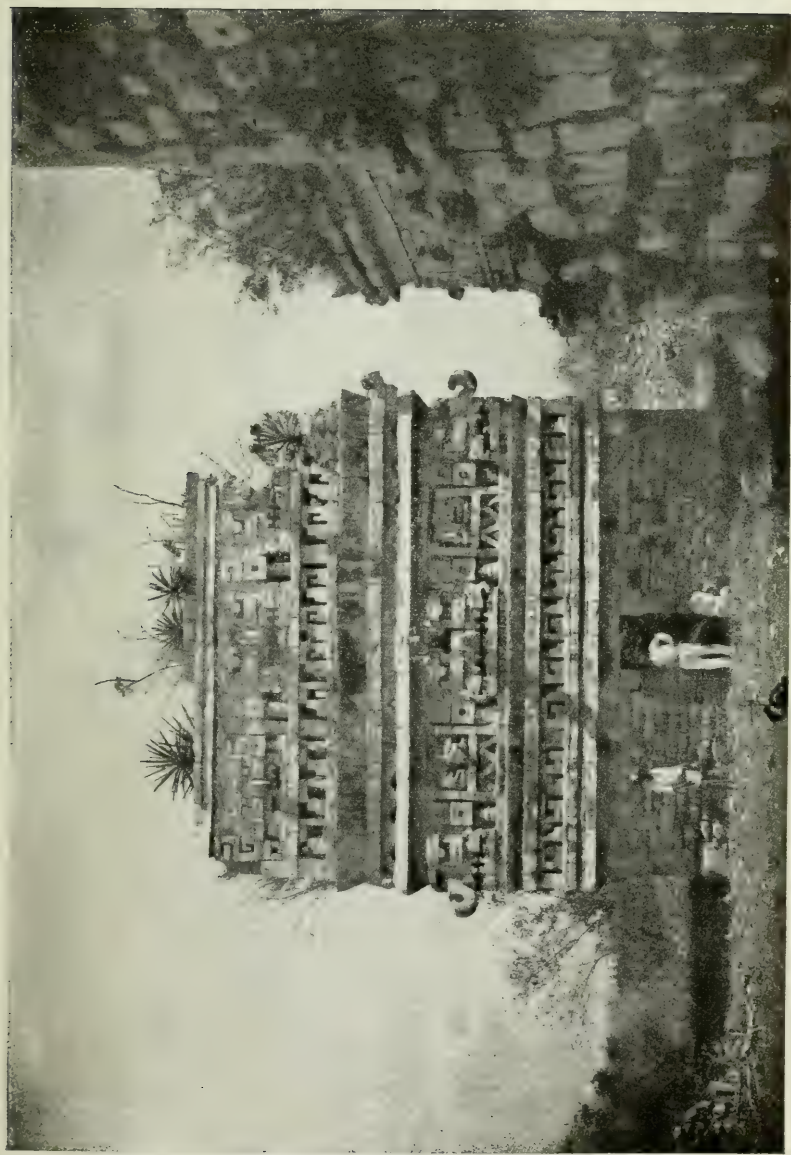
design, signify in Mayan 'engendered,' the same signs as deciphered by Champollion on the famous Rosetta Stone as meaning the same thing in the Egyptian tongue."

Some of these signs, it will be observed, take more or less the form of the "Greek" pattern, which is so freely encountered at Mitla and upon textile fabric and pottery in Peru, and in other parts of the world, as discussed elsewhere.

On the façade of that remarkable building at Chichen Itza known as Kuna, or God's House, is some strange sculpture of singularly shaped stones which appear to represent great visages. "These great faces," the last quoted account says, "were not intended as correct likenesses of any creature, but were a grouping of certain letters, which gave the ancient name of the prehistoric animal the mastodon. While it is commonly known that in Asia the elephant has been regarded with veneration for ages, it remained for us to learn from these old walls that the big American pachyderm had been similarly sacred among the people who anciently dwelt in Yucatan." The "trunk of the mastodon" projects from the walls. The illustration of this sculpture,<sup>1</sup> indeed, shows the remarkable trunk-like curved stones which are so striking a feature of the façade.

The foregoing writers point out other assumed analogies with Egyptian culture, including the figure of the Mexican sphynx and crocodiles which were unearthed by them. The great statue

<sup>1</sup> See my "Mexico."



RUINS OF CHICHEN ITZA.



of Chac-mol, which they excavated at Chichen Itza, weighed, it is stated, 3,500 lb. The statue is now in the Mexican Museum. In another tomb, "after many days' hard work there came to light a curious prostrate figure, which required sixteen men to haul it out and set it upright. If standing, this figure would have been 7 feet high. One leg was found broken off, and one foot was turned in, clubbed. One arm was shorter than the other, like that of Thoth, the preceptor of Isis in Egypt." One of the illustrations given by the Le Plongeurs shows a bas-relief with the Maya or Toltec headdress, which is stated to be similar to the pointed Egyptian headdress or sphent, except that the latter was worn with the point at the back by dwellers in Lower Egypt.

It is also remarked that "*Tat*, the Maya word for 'father,' was a name often applied to Osiris, and that the Egyptians always pointed to the west as the birthplace of their gods."

As regards the word *Tat* I might remark in passing that a somewhat similar term, viz., *Taita*, is the word for "father" among the Quechuas of Peru to-day, and was, of course, an Inca word. It is used as a term of respect, moreover, to the functionary or even to the traveller to-day in the Andine highlands.

Those who desire to follow the theories and deductions of the Le Plongeurs will find them set forth in the books published by the explorer,<sup>1</sup> and also in the article quoted.

<sup>1</sup> "Queen Moó and the Egyptian Sphinx; or, Sacred Mysteries among the Mayas and Quiches."

There are other noteworthy ruins in Yucatan, such as Chacmaltun, with fine wall-paintings; Tantah, with remarkable pillared façades; the ruins of Labna, Chunchuhub, and the caves of Loltun; and Xlabpak de Santa Rosa, where there is a three-storied temple palace. Two sculptured reliefs are of great interest. They represent a person holding a staff, on which is a figure of the god Ah-bolon-tzacab. The islands of Cozumel — where Cortes first landed — and Mujeres Island also contain smaller ruins.

It was a high aboriginal civilisation, already in its decline, that Cortes encountered, partly of deserted cities falling into ruins; whilst others, such as Chichen Itza and Uxmal, were still peopled by the last of the Mayas. There is no record of or reason for the decline of these people, as far as is definitely known. The great extent of these ruined structures seems to argue the former existence of large populations in well-settled districts, productive agriculturally, for there could not have been any system of commerce such as would have supported them. Possibly the exhaustion of the soil, drought, epidemics, &c., caused the decline, for the climate is hot and unhealthy, and the greatest problem must have been that of water conservation. There are, indeed, legends of great droughts, which also destroyed the Toltec empire.

How well these primitive engineers did provide against drought, by taking advantage of a curious natural feature—the underground flow of water in the flat limestone formation, in a land where



there are no streams—is shown by the famous *cenotes* or underground reservoirs, which afforded a perennial supply of water. Just as into the Ganges of India maidens were cast as sacrifices, so were virgins cast into these sacred wells of Yucatan.

In a subsequent chapter some Asiatic affinities with Yucatan are discussed.

## CHAPTER VIII

### CENTRAL AMERICAN MARVELS

Guatemala — British Honduras — Honduras — Salvador — Nicaragua — Costa Rica—Difficult topography — Pilpil civilisation—Migration from Mexico to Central America —Ancient sculptures and reliefs—Farthest limit of Maya culture —Chac-mol sculpture —Ruins of Quirigua— Beautiful stelæ—Ancient city—Terraces and plazas— Huge carved stones—Hieroglyphs—The “Greek” pattern —Santa Lucia Cozumalhuapa — Numerous ruins — Expedition of Cortes—Three pyramids—The Quiches—The famous Popol Vuh—Story of the Creation and the Deluge in prehistoric America—Ruins of Copan—Pyramids, ramparts, and terraces—Metal-craft of Chiriqui—Reading the hieroglyphs—Junction between Mayas and Incas—Ecuador and Columbia—Mysterious conquerors.

THESE is no slackening of archæological interest on crossing the merely modern political boundary between Yucatan and Chiapas, and Guatemala and the other Central American Republics. No ethnological division occurs, and both archæologically and physically the two regions merge into each other.

Guatemala is a fairly large and flourishing republic, but, like all her neighbours, with great areas of undeveloped territory. To the north lies a small portion of the British Empire—British Honduras. South-eastwardly thence are

Honduras, the republic, Salvador, Nicaragua, and Costa Rica, all independent republics, known principally to the British or American reader by reason of questionable financial matters. Lastly there is Panama, with its great canal.

It is only of comparatively recent times that much investigation has been made into the archæology of this region, which astonished Europe when first brought to notice, but nevertheless painstaking research has been carried out.<sup>1</sup> The fact of close connection with Mexican culture is well established, and it is held that some Central American peoples were actually Mexican in their language and culture, especially the Pipils and a large part of the population of Nicaragua. Discoveries made<sup>2</sup> in Central America during the years 1907 to 1909 determined the fact that elements of Mexican origin extended through Guatemala, Salvador, and portions of Nicaragua, as well as in several places in Costa Rica.

It is to be recollected that these regions of Central America, the smaller Spanish-American republics of to-day, cover a large area of territory, consisting of mountain ranges, profound valleys, lakes, swamps, tangled forests, and fiery volcanoes. Indeed, Central America embodies perhaps the most diversified part of the earth's surface, and has been and still is the scene of mighty natural operations and forces. Never-

<sup>1</sup> Especially by Lehmann, Maudslay, and other well-known explorers.

<sup>2</sup> By Dr. Lehmann.

theless, this pre-Hispanic civilisation overcame these obstacles, and man spread and practised his stone-shaping arts in profusion along that great belt of savage territory.

It is stated to be an error of the Spanish historians who held that the Pilpil civilisation in Guatemala and Salvador was not older than the time of King Ahuitzotl of Mexico<sup>1</sup>—1482-6—during the Aztec regime. The language spoken by the Pilpils of Salvador on the Balsam coast, recent authorities state, is a very old dialect of the Mexican language of the highland of Mexico, and has preserved forms still older than the original and classic Nahuatl itself. The separation of the Pilpils from the chief tribes of the Nahuatl branch must have happened centuries before the Conquest. They developed a strange civilisation, vestiges of which can be seen in the remarkable stone-reliefs and sculptures of Santa Lucia de Cozumalhuapa on the Pacific coast of Guatemala. Archæological and linguistic researches,<sup>2</sup> especially in Salvador and Nicaragua, also enabled another very important fact to be proved, viz., that these Pilpils, who may be descended from the peoples of the Mexican plateau, migrated into territories previously occupied by an older race of Mayan origin. The new and interesting evidence secured proves in addition that people of the Maya race once occupied a great part of Salvador and Honduras. Typical Mayan ruins

<sup>1</sup> One of the Mexican Aztec kings.

<sup>2</sup> Of Dr. Lehmann, the most recent authority.



RUINS OF QUIRIGUA, GUATEMALA.

Stela 10 feet high, with hieroglyphs.



in Honduras, at Tenampua, and in Salvador, near Tehuacan, and Quelapa, near San Miguel, were left by these people, although Mayan hieroglyphic inscriptions are not encountered. The most easterly limit of pre-historic Mayan civilisation on the Pacific coast of Central America is that of Fonseca Bay, with the island of Zacate Grande. It has been shown that archæological remains of the type found in northern Honduras, in the Ulloa Valley, have been encountered on the Pacific coast of Salvador, including a curious stone sculpture of the so-called Chac-mol type, known before only from Tlaxcala and Chichen Itza. In the nearly unexplored part of Nicaragua, Dr. Lehmann found fragments of painted polychrome clay pottery. It is possible that these remains of Mayan pottery came into Central Nicaragua as articles of commerce. It is remarked that evidences of Mayan civilisation cannot be found in any other part of Nicaragua or Costa Rica, which seems to point to the limit of this culture geographically.

The remarkable ruins of Quirigua, in Guatemala, near the border of Honduras, lie close to the Guatemala railway, which traverses that very narrow portion of America from Puerto Barrios on the Atlantic side to San Jose on the Pacific side. Here, in a valley which is described as "a sheltered tropical paradise," is the home of one of the oldest American civilisations, and there are many temptations for the traveller to visit it.

The banks of the Montagua River for a dis-

tance of some forty miles, and comprising an area of some two hundred square miles, is dotted with ruins of an ancient race. Graves, mounds, monoliths, and stone heaps testify silently to the life which once filled the valley. Undoubtedly a large part of the Mayas found a most agreeable home here.<sup>1</sup>

The principal place of interest is the ruined city of Quirigua, still in the heart of the jungle, and this must have been the metropolis of the primitive people in pre-Hispanic days, for here they built their great square and erected the beautifully sculptured and massive monoliths, which are undoubtedly among the most remarkable examples of the early American stone-shaping art. These remains are now preserved by the Guatemala Government as public property.

The principal monuments are of stelæ, or vertical pillars of carved stone, animals and reptiles carved in stone, blocks, terraced walls, temples, and pyramids. The ancient city is laid out with a large central plaza, or square, and a smaller court. The hills about two miles away appear to have furnished the stone for these structures, which may have been floated to the spot by stream and canal, remains of which latter still exist.

“The main group of buildings seems to have been built in the form of an enclosed court. The terraced walls which form this court to the east and south average some 30 to 40 feet high. At

<sup>1</sup> V. M. Cutter, in the “Bulletin” of the Pan-American Union, Washington, January, 1911.



this point partial excavation has shown several rooms with walls of squared stones and doorways arched with flat stone. To the north the plaza is open, with an immense terraced pyramid in the centre of the opening. This pyramid measures some 150 feet square at the base, and rises to a height of over 40 feet. All the walls and terraces are overgrown with immense trees, and the stones are displaced badly by the roots, which have forced them out of place and sent them tumbling down the walls.

“Near the southern wall and directly facing the pyramid before described lies an immense round carved stone weighing probably well over twenty tons. The main figure on this stone is that of a woman, elaborately dressed, and is claimed to constitute one of the most wonderful known monuments of ancient civilisations in existence. The top and sides of this stone are completely covered with glyphs and figures, with probably several Mayan dates included.”<sup>1</sup>

The illustration of this remarkable stone shows the boldly and beautifully executed sculpture of the woman's face, and lower down is seen the inevitable “Greek” pattern, such as is sculptured on the walls of Mitla, figured on Peruvian pottery and textile fabrics, and familiar in decorative art all over the ancient and modern world, as indicated on page 244.

“Near the eastern wall is a circular stone with the figure of a man in sitting posture, and surrounded by picture-writing as yet undeciphered.

<sup>1</sup> “Bulletin,” *ante*.

Near by lies a stone, carved possibly to represent a tiger's head. Outside the temple court are two stelæ about 10 feet in height, with figures of women on front and back, with glyphs on either side, these latter being surrounded by ornamental feather or scroll work. Near the latter stones are several stelæ, which have fallen or been thrown down by some ruthless explorer.

“ These stelæ are remarkably well preserved. They are of sandstone, the carving in low-relief, and not as ornate as that at Copan in Honduras. It is stated by archæologists who claim to have deciphered the Mayan dates of the glyphs that these stelæ were set up at intervals, most of the dates being of the ninth and tenth cycles of Mayan chronology. Other stelæ are encountered near at hand, three in a row, the tallest being 26 feet above the ground, covered with beautiful carving and glyphs, with the huge headdress and death's head and crossbones characteristic of nearly all these figures of Quirigua. The largest of these stelæ leans over at an angle, is 5 feet square and 20 feet high, with probably 10 feet more below the surface. How were these huge stones brought here? for even to-day their transportation would be a problem through the soft soil of the valley on whose base they exist.

“ In this last-named group are two large oval carved stones which must weigh over ten tons each, one apparently representing a turtle and the other a frog. Other walls, stones, and carvings of equal interest are covered up with soil and silt, and only further excavation can

reveal them and the ruins as a whole, and shed further light upon the race who set them up."

Still in Guatemala we reach Santa Lucia Cozumalhuapa, the remains of a pre-historic centre which was in ruins even at the time of the Spanish advent, when the Conquistador Alvarado arrived there in 1522, after the conquest of Mexico. This is a peculiar site on the Pacific slope of the Cordillera, and the remains consist principally of enormous blocks of stone sculptured with gods, goddesses, and other figures of a distinctively Mexican character, with various Mayan features, attributed, as before mentioned, to the Pilpil Indians, an offshoot of Nahua stock.

Guatemala is indeed rich in these ancient ruins, which are numerous and extensive and distributed over a wide area. At Piedras Negras, Yaxchilan, or Menche and Tinamit, are important ruins—temples covered with sculptured reliefs and hieroglyphic inscriptions, and stelæ and slabs carved with human figures placed in niches. In the Peten district Tikal is famous for its splendid sculptures representing Kukulcan and other divinities. Near the modern city of Guatemala are the vast ruins of Guatemala-Mixco. Chacujal, which Cortes visited on his expedition of 1524-5, is very possibly to be identified with the modern Pueblo Viejo on the River Tinaja.

The expedition of Cortes to Honduras, it will be recollected, was marred by the incident of the murder of the unfortunate Guatemoc, who

had accompanied him and who was hanged head downwards from a tree after a mock trial, by order of Cortes. This was one of the most barbarous acts committed by the Conquistadores, and ranks with that of the murder of Atahualpa at Cajamarca, in Peru, by Pizarro, about ten years later, during the Conquest.

Between the headwaters of the Rivers Chiapas and Lacuntun are other noteworthy remains of prehistoric Guatemala: a series of three pyramids, as also pyramids with human figures on their platforms; whilst at Quen Santo "stelæ with a calendar character prove that Mayan sciences had penetrated into what was probably the home of an old Lacuntun culture."

Guatemala was the home of the great Quiche nation, who, at the time of the Spanish Conquest in 1524, when they were so ruthlessly destroyed, were the most powerful of the three Mayan peoples in that region. The famous Popol Vuh, their Sacred Book of History, containing a mythological cosmogony, is one of the most important documents of the early American people. It was translated into Spanish by the Dominican Friar Ximenes, and a French version was written by Brasseur de Bourbourg. There is also an English edition.<sup>1</sup> To its tradition "may be due the remarkable similarity of the Quiché Creation story to that of the Old Testament."<sup>2</sup> This book begins "with the time when there was only the heaven with its boundaries towards the four

<sup>1</sup> Spence (1909).

<sup>2</sup> Encyc. Brit., "Quiches."



CARVED STONE AT QUIRIGUA, GUATEMALA, WEIGHING ABOUT 20 TONS. EXAMPLE OF MAYA ART.



winds, but as yet there was no body, nothing that clung to anything else, nothing that balanced itself or rubbed together or made a sound ; there was nought below but the calm sea alone in the silent darkness. Alone were the Creator, the Former, the Ruler, the Feathered Serpent, they who give being—and whose name is Gucumatz. Then follows the Creation, when the creators said 'Earth,' and the earth was formed like a cloud or a fog, and the mountains appeared from the water, trees covered the hills and valleys and their forests were peopled with beasts and birds, but these could not speak, but could only chatter and croak. So man was made first of clay."

The Quiches had a skilfully fortified capital and an extensive system of government and religion, and their records were kept in picture-writing. Guatemala to-day is full of interesting historical lore, and offers many allurements to the traveller.

Leaving Guatemala, we enter its sister republic, Honduras, and here are the important ruins of Copan, close to the border. This place was one of the principal centres of the Mayas. Pyramids, temples, and the ruins of great buildings mark the bygone civilisation of these ancient people here in this narrow land between the Caribbean Sea and the Pacific Ocean. Copan is only some thirty or forty miles from Quirigua, last described. Altars, in the form of a turtle, and stelæ covered with hieroglyphs, exist, the meaning of which latter " is so far clear that it is known that

the commencement of an inscription records certain dates in the complicated calendar system of the Mayas. A collation of these dates demonstrates that the most ancient on record are separated from the most recent by an interval of only a few centuries. From this it may be concluded that the Mayan civilisation, whether or not it was preceded by anything older, flourished for only a comparatively short period, the beginning of which cannot be placed many centuries before A.D. 1000." <sup>1</sup>

The carvings and sculptures in the British Museum, discovered and brought to England by Mr. Maudslay, show the character of the monuments of Copan.

Other ruins in this republic, of "large pyramidal terraced structures often faced with stone, conical mounds of earth and walls of stone," are found near Yarumela, Lamajini, and the ruined town of Cururu, on the plains in the province of Comayagua, and others in the side valleys and adjoining tablelands. Tenampua shows ruined ramparts, defence works, terraced stone mounds, and numerous large pyramids. There are other ruins in the western part of Honduras.<sup>2</sup> Remains which indicate the former existence of a large population are found at Rio Ulloa; and, indeed, this broken land of deep valleys and tablelands—for Honduras mean "depths"—tells the same tale as its neighbours, of buried temples and bygone civilisation.

<sup>1</sup> Encyc. Brit., "Central America."

<sup>2</sup> Described by Squier.



Even British Honduras, that small-holding of the British Empire in South America, bounded by Guatemala and Yucatan, and lying to the north of its neighbour of the same name, has antiquities, although they have been but little investigated and command but a scanty literature. Near Santa Rita wonderful wall paintings in stucco came to light, but have in the main been destroyed after their discovery by the Indians. These ruins, it is shown, were erected over buildings of more ancient date. Some of the old buildings resemble those of Yucatan.

The little republic of Salvador, lying to the south of Honduras, has numerous relics of Mayan civilisation buried in the earth; few ruins are to be seen on the surface. There are, however, three large ruins: Cuzcatlan, near the capital, Tehuacan, and Zacualpa, on the Lake of Guija. "A characteristic feature of the extensive ruins of Zacualpa is that the pyramids and ramparts have perpendicular steps which are higher than they are broad, and this peculiarity may be attributed to the influence of the Maya tribes."

As before mentioned, Nicaragua and Costa Rica—the latter the little republic enjoying the best climate and most advanced people of this region—have comparatively little of archaeological remains. Panama has even less, perhaps, except that Chiriqui was a centre of pre-Hispanic metal-craft, as mentioned elsewhere.

We have now reached the limit of the civilisation and influence of the Mayas. It extended,

as we have seen, over a wide range of territory, probably as much as or more than a thousand miles in length. A study of Mayan hieroglyphs has yielded some results to decipherment, "but had the available material for study been confined to the few Mayan picture manuscripts which had survived the destructive fanaticism of the Spanish missionaries, little progress would have been made beyond establishing subsidiary details in the actual calendar which, analogous to that of the Mexicans, was said to have been used by the Mayas. But when a similar analysis was applied to the numerous monuments discovered and figured,<sup>1</sup> some important results of a general bearing were obtained. It was found that many of the hieroglyphs of various forms upon the stones were also of numeral value, and, what was of great importance, that they all referred back to a single starting-point. This starting-point or zero is no doubt the mythological date at which, according to Mayan cosmology, the world was created. It is placed at nine or ten cycles before the time when Copan and Quirigua were erected and the picture manuscripts made."<sup>2</sup> It has been possible, from these matters, to adduce some chronological record of the most famous of these monuments, and "to confine the period of their erection within the space of a few centuries, and approximately to fix even their absolute antiquity,"<sup>3</sup> as mentioned before.

<sup>1</sup> By Maudslay and others.

<sup>2</sup> Encyc. Brit., "Central America."

<sup>3</sup> Ibid.



BAS-RELIEF FROM QUIRIGUA, GUATEMALA.



Thus we leave the vast regions of North and Central America, with their strange secrets of buried temples and barbaric civilisations. We leave it to enter upon another and equally vast and mysterious region—that of South America and the Incas. We pass along that narrow neck of land beyond the Panama Canal, wherein lies that classic “peak in Darien,” from which Balboa, on September 25, 1513, first beheld the Pacific Ocean—the first white man, indeed, to look upon it—and so reach the great continent of which Colombia and Ecuador are the northernmost countries. Below them, across the Equator, lies Peru.

Colombia may be looked upon as a meeting-ground between the Aztec and Inca cultures. The tribes of the highlands preserve characteristics more akin to those of the Aztecs than to any other race. At the time of the Spanish Conquest the most important of these tribes had attained a considerable degree of civilisation. They lived in settled communities, cultivated the soil, and “ascribed their progress towards civilisation to a legendary cause remarkably similar to those of the Aztecs of Mexico and the Incas of Peru.” The Tayronas, of the Santa Maria highlands, who have totally disappeared, were also remarkable for the progress which they had made towards civilisation. Evidence of this is to be found in the excellent roads which they constructed and in the skilfully made gold ornaments which have been found in the district which

they occupied, as well as in the contemporary accounts of their conquerors.

Ecuador had its mysteries, even before the time of the Incas. The earliest people known there were the Quitus, who had evolved and extended an empire from warring savages, until, as tradition records, in the latter part of the eighth century a people from some unknown source, calling themselves Caras, appeared upon the coast in large rafts and established a regular form of government under a sovereign called Seyri. They worshipped the sun and moon, were skilful astronomers and learned in certain arts and sciences, their civilisation being a higher one than that of the Quitos, whom they supplanted. They governed the country for four and a half centuries, until they themselves were overthrown by the advent of the Incas, under the Emperor Tupac Yupanqui, in 1450. Thus it was that conquest preceded conquest in these great regions, long before the Spaniards appeared—strange doings of peoples who came out of the Unknown, and established something of order from savagery and chaos.

## CHAPTER IX

### THE INCAS—CHILDREN OF THE SUN

The fascination of Peru—Means of travel—Some of the wonders of the world—Remarkable building sites—Topographical situations — Climatic influences — The coast zone—The Incas and pre-Incas—The Andes—Extent of Inca Empire—The Quechua language—Relative ages—The son of the sun—A “ virgin birth ”—Duration of Inca empire—The famous royal roads—Lake Titicaca—The ruins at Cuzco—The “ navel ” of the Empire—Sacsaihuaman—Inca stone masonry—Fortress of Ollantaytambo—Intihuana and Pisac—Astronomical pillars—The throne of the sun—The Amazon forests—Unfathomable Tiahuanako—The “ Unknown God ”—Prayer to the Creator.

WHO has not felt the lure of romance attending the name of Peru, that far-off land of Pizarro and the Incas, of which even to-day we hear so little? The Peru of old was a land of wondrous things, and in many respects it is the most interesting portion of the vast field we have set ourselves to tread in this volume. The long journeyings within this land of great mountains and deserts—the Tibet of America, the roof of the world in the Western hemisphere—which fortune called upon me to make have left impressions which time will not easily banish.

Our study of the prehistoric culture and archi-

ture of Peru will take us farther back in time than that of Mexico perhaps. To visit its ancient stone ruins will, in many cases, demand a greater tax upon our endurance, for Peru is one of the most inaccessible countries of the world, as regards its interior. Roads are conspicuous by their absence, and the few railways, constructed with foreign capital at enormous cost, are only just beginning to send out their branch lines into the remote valleys and plains.

Nevertheless, some of the most famous ruins of the Inca and pre-Inca periods are adjacent to the railways and can be visited by the traveller without great discomfort, although the mere tourist is scarcely likely to be attracted to the Peruvian interior at present.

In these high regions of the Cordillera of the Andes, on the great plateaux and the slopes of precipitous and inaccessible valleys, we encounter a series of ancient stone structures of great interest and importance, in some cases unique among the wonders of the world. The extraordinary love or habit of building halls and temples of laboured stone in the most inaccessible positions that the mind of man could conceive is the most remarkable feature of the early Peruvian culture. These old cities were not set on alluvial plains or by the estuaries of navigable rivers, but in places where their inhabitants might have been supposed to possess some of the attributes of the condor and the vicuña in order to carry on their traffic there! The sites of Egyptian and Assyrian ruins were child's play





INCA FORTRESS AT OLLANTAYTAMBO, SOUTHERN PERU.



in comparison with the eyries of the Andes, and we can only marvel at the seemingly purposeless energy displayed until we reflect that necessity, forced these people to adapt themselves to their only environment. There are, of course, ruins of cities which are set by the sea, but these were relatively evanescent in comparison with the habitations of the highlands.

Before entering upon a detailed description of the Peruvian culture and archæology let us briefly consider—and it is necessary to a proper understanding of the subject—the topographical conditions surrounding the old Empire of the Incas. As we approach Peru from the sea we are confronted with a long, sterile shore, beaten by tearing surf between the few havens. There is no sign of life upon the seaboard, except the cry of the seals and the occasional flights of guano-producing sea-birds, which fly at times in veritable clouds upon the face of the water. As for man and his habitations, except for the few seaports and the streets and houses clustered around them, and the irrigated plantations in the vicinity of the few rivers which descend from the Andes to the sea, across the eighty to one-hundred-mile-wide strip of coast lands, and the occasional *pueblo* and Indian hamlet, there is little to be seen. The coast lands are mainly sun-beat deserts, which for hundreds of miles separate the valleys where agriculture is possible under irrigation. For the coast-zone of Peru, lying between the foot of the Andes and the Pacific Ocean, is a rainless region fourteen hundred miles

long, extending southwards, into the appalling deserts of Tarapaca, in Chili. Rain practically never falls, and the only atmospheric moisture is the *garua* or evening mist-drizzle at certain seasons. Nevertheless, it is upon this coast-zone, which enjoys a generally excellent climate in other respects, that the Spanish-American peoples have mainly taken root; and Lima, the attractive capital of the Republic of Peru, is situated thereon, a short distance inland, as well as other cities.<sup>1</sup>

Crossing this dry coast-zone, we rapidly ascend the Andes, and encounter climatic conditions exactly the reverse of those we have left below. Heavy rainfall and snowfall, bracing and rarefied air, and perpetual snow upon the summits are the characteristics of this lofty region. Topographically this region consists of great, high, bleak plateaux, from 10,000 feet to 16,000 feet above sea-level, absolutely treeless; and to reach these from the coast or from the interior, or, indeed, from each other, we have to cross the intervening ranges of the Andine Mountain system—vast parallel ranges whose passes are rarely less than 14,000 feet above sea-level, and whose peaks rise in some cases to more than 20,000 feet elevation, far above the line of perpetual snow. I have crossed these inclement plateaux and passes on many occasions, and retain strong

<sup>1</sup> Some of the particulars in this chapter were given in my lecture to the Architectural Association of London; also before the Royal Society of Arts (Medal awarded) and Royal Geographical Society.

recollections of toilsome days and months spent on mule-back amid their alternating sunshine, rain, and snow—toilsome yet full of that peculiar pleasure which the traveller knows. Some of the snowy passes and peaks, indeed, which I explored had never been trodden previously by the foot of a white man, nor, indeed, of any human being. The mountain sculpture of the Andes is beautiful and striking; the rising or setting sun tinges the snow-crowned peaks with that ruby glow known to the Andine or Alpine traveller, and the vast, heavenward-pointing ridges of upturned strata of the Silurian or Cretaceous periods and the great uplifts of plutonic rocks form mighty façades and far-reaching Andine towers and aisles—an eternal architecture which surmounts the work of man's hands that lies below, and perhaps has influenced its character.

I have dwelt thus upon the climate and topography of Peru because it bears in an important way upon the architecture of the Incas and pre-Incas who flourished there in past ages. The mural remains of these people, their great monuments in stone and sun-dried brick are found all over the region of the Cordillera, and to a lesser extent upon the coast, and their character varies much in accordance with their situation and climatic environment. Thus upon the rainless coast-zone the buildings were largely of adobe, or sun-dried earthen bricks, the well-known material used throughout Spanish-America to-day, whether in Mexico, Peru, or

Chile ; whilst as we rise to the rainy region of the mountains we observe that they are of stone, shapen or unshapen. The adobe lasts for centuries on the dry coast plains ; it would have perished long ago upon the rainy plateaux and become obliterated, and here it is that the beautiful examples of the stone-shaping art of these pre-Hispanic people are found in its perfection. The whole region over which these monuments are found may be taken as more than fifteen hundred miles long by three hundred miles wide, extending throughout what is now Ecuador, Peru, Bolivia, and part of Chile—an enormous range of territory for a semi-civilised people to influence, and greater than that which included the civilisation of the Euphrates and the Nile together.

The Inca empire flourished, as far as can be ascertained, from the time of the first Inca, Manco Capac, who founded the dynasty at the beginning of the eleventh century, to the time of the arrival of Pizarro, before whom it fell, by the overthrow of Atahualpa in 1532. Thus it would seem to have been approximately coeval with the Aztecs and Mayas of Mexico and Central America.

Like those, however, it was far from being a self-derived culture. The Incas, of course, were not a people, but a reigning family, dominating a number of peoples, the main body of the Empire being the Quechuas, and the Quechua language was spoken throughout the vast region of this Empire. The Quechua language, it is to



TYPES OF QUECHUA NATIVES, NEAR CUZCO, SOUTHERN PERU.





be recollected, is still the language of the highland people of South America, in conjunction with the Aymara tongue. It was not a mere Indian dialect, but a language of such grammatical construction and attributes as must have taken a thousand years of its own peculiar civilisation to evolve. The culture next preceding the Inca was that of the Aymaras, whom it is assumed the Incas overthrew.

Thus it is that the civilisation of early Peru is not to be measured by the relatively recent culture of the Incas, and this is borne out by examination of the great stone monuments—temples and fortresses—scattered throughout the country, whose respective epochs are readily determined. These mural remains are, therefore, of different peoples and epochs, some being probably only a few hundred years old, whilst others, it can scarcely be doubted, belong to periods measured probably by thousands of years, and of their origin nothing definitely is known. The strong tendency to trace their unknown builders to an Asiatic or at least a foreign source is dwelt upon subsequently.

Even the beginning of the Incas is wrapped in fable and myth. The sun, the legend states, looking down from heaven, saw the necessity for a more rapid civilisation of those vast regions, and he sent forth a son to instruct the half-savage tribes. This son came into the world—one legend relates—through the medium of a virgin birth: a wise woman, Mama Huaco, being pregnant, gave out that she had conceived by the sun.

When the child was born his mother concealed him in a cave on an island of Lake Titicaca, and in company with her daughter worshipped him as king and lord. The boy grew up marvellously wise, and was acclaimed by the Indians as their benefactor and ruler, under the name of Manco-Capac, or the "Almighty Child." He married his own sister, and the line of Inca emperors was perpetuated by the marriage of the Inca with his sister. These myths and matters must have been first pending about a thousand years ago, and the names and history of some thirteen Inca rulers from Manco-Capac down to Atahualpa, at the time of the Conquest in 1532, are recorded.<sup>1</sup>

The Empire of the Incas had as its main centres Cuzco—the word itself signifies "the navel"—in Peru, and Quito, the capital of Ecuador, upon the equator; and these centres were connected by the famous Inca roads, which some historians—generally those who have not seen them—have described as equal to the roads of the Romans, which statement is far from being true. The accounts of these roads as structures have been grossly exaggerated. I have traversed them at various points, and have described them elsewhere.<sup>2</sup> They were, however, means of communication of the utmost value to the Empire, and although they were nothing more than trails for the llamas, those wonderful camels of the Andes which were the only beasts of

<sup>1</sup> Garcilasso de la Vega, the Inca historian.

<sup>2</sup> "The Andes and the Amazon."

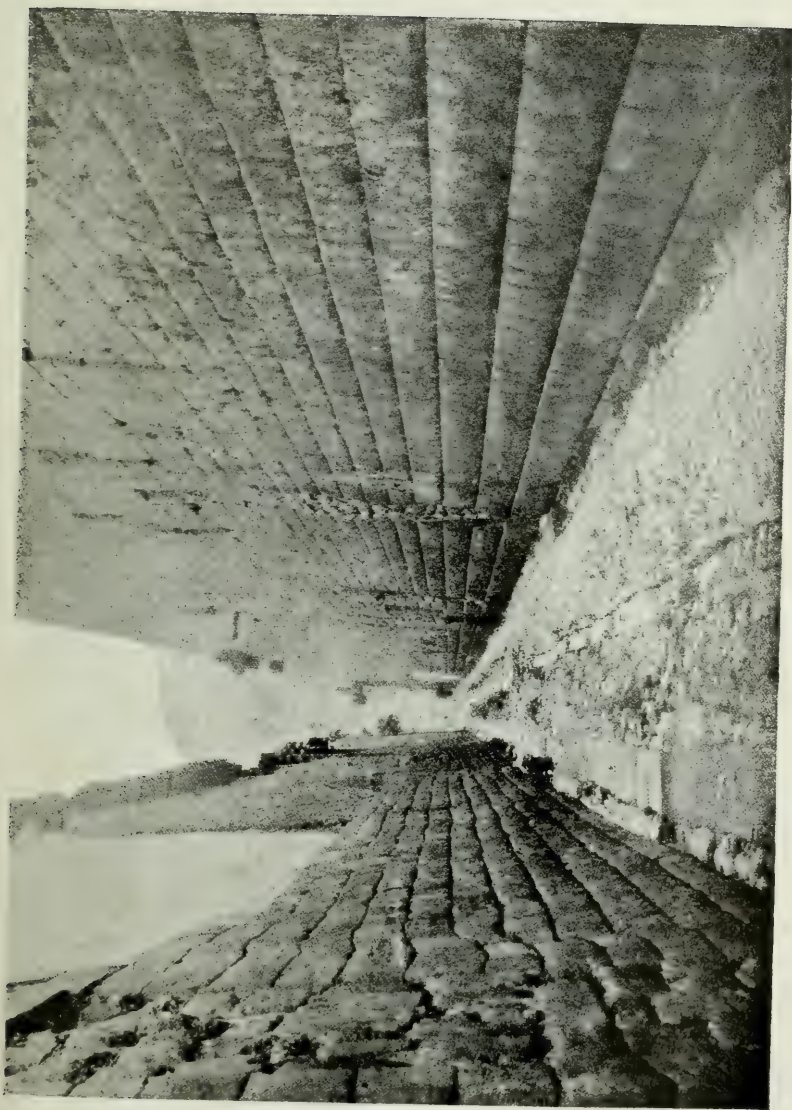
burden known to the people, who possessed neither horses nor wheeled vehicles, they gave access from place to place, and were traversed by the remarkable system of posts and postmen maintained by the Inca Government. These roads, from Cuzco to Quito, were more than 1,100 miles long—a distance greater than that from ancient Babylon to Egypt. Moreover, as engineering structures even, these roads were of considerable merit, crossing by rock-hewn steps the summits of the Andes above the perpetual snow-line, passing swampy lands by stone causeways, and rivers by means of the remarkable suspension bridges made of woven grass or osiers, and by stone structures. Native bridges of a somewhat similar character exist in the Himalayas, it is to be noted.

There were two main roads. They both traversed the country longitudinally along the line of least resistance paralleling the ranges of the Andes. One, the most remarkable, ran along the high plateaux and summits of the Andes; the other followed the lowlands of the coast. The groups of buildings which we are to consider are in some cases disposed along the line of these roads, or are adjacent thereto, portions of the roads only remaining here and there. The structures consist mainly of castles and fortresses, temples, palaces, astronomical observatories, tombs, and groups of habitations or towns. All of these are now abandoned and in ruins, with the exception of some which form the base of Spanish structures at Cuzco.

The centre or first materialising-point of these early Peruvian civilisations—leaving aside for the moment those which had their habitat on the coast—was the remarkable lake-basin of Titicaca and its environs—a large territory contained between the main ranges of the Andes, where these mountains reach their greatest development in Peru and Bolivia. This lake, it will be recollected, is in some respects the most remarkable in the world, being 12,350 feet above sea-level and so large that the steamer upon which we embark to traverse it takes us out of sight of land. It is also noteworthy in being, in conjunction with its sister lake Poopo, a hydrographic entity, with no outlet for its waters except that of evaporation, unless there be some unknown subterranean vent to the Pacific.

In and around this great plateau and lake region are found the most important remains of the Inca and pre-Inca cultures.

Cuzco, the old Inca capital, lies less than two hundred miles from the lake, and was the great Mecca of the people and the seat of government. Overlooking the city—which to-day is an important, populous place, standing 11,000 feet above sea-level, is what is perhaps the most remarkable pre-historic structure in the New World, and indeed in some respects in the whole world. This is the fortress of Sacsaihuaman. It consists of a series of four or more great walls, from 12 feet to 25 feet high, forming terraces up the hillside 1,800 feet long. It is difficult to obtain an adequate idea of this structure from photographs,



AN INCA STREET AT CUZCO.



due to its extent and massiveness. The walls are built as great revetments, with twenty salients at regular intervals, the masonry being formed of Cyclopean worked stones, which in some cases are nearly 20 feet high, weighing many tons.

We are at once struck on observing the walls of this fortress, as well as those of others of the Inca buildings, with the remarkable character of the masonry, not so much by the size of the monoliths as by what is either a singular disregard of uniformity and alignment in the joints or is a curious, purposeful variation of these. Thus we see that each stone is an individual, not a counterpart; a polygon, not a cube. In some cases the stones are cut out to fit each other in a way such as must have involved much labour, especially when it is recollected that the Inca masons probably had no means of laying out angles; so that presumably the stones were made to fit each other by the laborious method of constantly removing and replacing. It might seem that this giving of an individuality of form to each stone was a nice and purposeful art, or carried out for some now unknown reason. Notwithstanding this diversity of surface, the contact between the stones is generally so perfect that a knife-blade cannot be inserted; and there is no mortar. In some of the temples, it is stated by the Inca historian Garcilaso, gold and silver was used as a bedding material for the stones. Whatever may have been the reason for this lack of uniformity in the Inca masonry, it is singularly beautiful and unique, and the walls

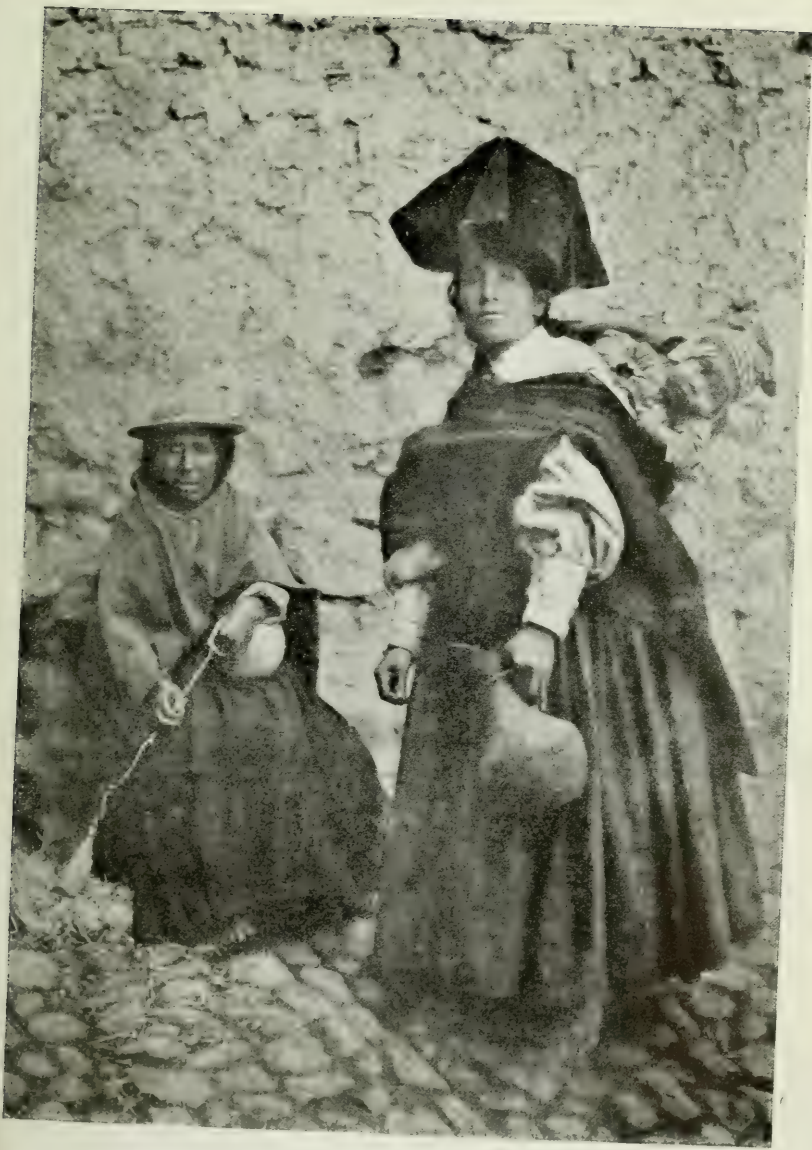
have well resisted the ravages of time and the elements. In the streets of Cuzco some well-preserved examples of Inca walls form part of modern buildings, as before mentioned. A good example is the wall which was the base of the Palace of Huayna Capac, one of the latest Inca emperors. Here massive stones are encountered, polygonal in form, fitting perfectly into each other. One of these, it will be observed, is a twelve-sided polygon. This wall forms part of an Inca street, which is used to-day. In the city of Cuzco there are other Inca buildings, notably the remains of what was the Temple of the Sun, with a curved front. Overlooking the valley we have also the singular steps or terraces, cut out of the living rock, which is termed "the seat of the Inca," and it is stated that the Inca Emperor took his seat here to watch the construction of the great fortress.

Analogies have been drawn by some observers between the massive Inca stonework and that of Easter Island, and, indeed, with the stonemason's art in Greece, as noted elsewhere. The Inca stonework was noteworthy in its character. "The world has nothing to show in the way of stone cutting and fitting to equal the skill and accuracy displayed in the Inca structures of Cuzco."<sup>1</sup>

At about a day's ride from Cuzco we reach the head of the Yucay Valley, and see its base 4,000 feet below. Upon the slope of this remarkable valley—it is one of those which drain

<sup>1</sup> Encyc. Brit., "Peru."





TYPES OF NATIVE WOMEN AT TIAHUANACO, BOLIVIA.



into the affluents of the Amazon—the ruins of another remarkable fortress are encountered—that of Ollantaytambo. This also consists of great terraces of Cyclopean masonry. We also observe here, in this structure, a common feature of Inca architecture—the series of niches in the walls, with their characteristic trapezoidal form, giving a unique and handsome effect. No style of building could accord so well with its environment as these massive structures of the Incas. Possibly the builders were influenced by the mighty mountains which overhang their valleys, as I have before averred, and strove to adapt their work to the stupendous Andine architecture on every hand, which they conceived perhaps as fashioned by the “Unknown God” to whom some of their temples were raised.

Another remarkable group of ruins in the same region is that of Intihuatana and Pisac. The latter is another imposing fortress upon the summit of the mountains, a remarkable situation with an extensive view of the surrounding cañons. But this fortress of Pisac had its own sacred purpose. It enclosed—and still encloses—the temple wherein stands the famous astronomical stone or pillar of Intihuatana. This word means in the Quechua tongue, “the seat or throne of the sun,” or the place “where the sun’s rays are collected.” The pillar was, in fact, the instrument by which the Inca astronomer-priests determined the solstices. The column, now broken, but still existing, is worked out of the solid rock. It is enclosed by a circular tower, and in this the

priests observed the shadow of the column upon an east and west line inscribed upon a circle which surrounded it. When the day approached great feasts were celebrated, and a golden stool was placed upon the shaft, so that "Inti," the sun, might "sit down" upon it, for the solstice. There were others of these astronomical pillars throughout Peru and Ecuador, but they were generally destroyed by the Spanish priests after the Conquest, as "things of the devil"! The fortress and buildings surrounding the column-chamber are beautifully executed — stone-built corridors, halls, and chambers; whilst the whole place, surrounded by beetling precipices and protected by revetments of granite masonry, is impregnable. In the rock walls of the valley are seen ancient tombs in absolutely inaccessible positions to-day. These great fortresses commanded the valleys leading down to the region of the Amazonian forests below, and were to protect Cuzco and the Empire from the incursions of the savage tribes dwelling there. Even to-day the forest region beyond the Andes is a savage, unexplored territory in great part, inhabited by bands of Indians, although the business of rubber-gathering is opening it up to some extent, and bringing in "civilisation"—if the particular kind of commerce sometimes carried out with an accompaniment of alcohol, rifle-bullets, abductions, and torture may be so termed! <sup>1</sup>

<sup>1</sup> A serious exposure of this matter was recently made concerning the Peruvian Amazon by the British Foreign Office.



RUINS OF INTIHUATANA AND PISAC, SOUTHERN PERU ; WHERE THE INCAS DETERMINED THE SOLSTICES.

Drawn from a photo.



The Incas penetrated but little into these dense Amazonian forests and valleys. There are, however, evidences of some pre-historic activity in that vast region, and it may be that more extended exploration may unearth vestiges of some bygone culture. There are indications which almost cause the observer to ask if some powerful semi-civilisation did not at one time inhabit the forest region, and it has even been conjectured that the savage tribes are the degenerate remains of such.

Perhaps the most interesting centre for the archæologist—at any rate, it is the most ancient—is that of the ruins of Tiahuanaco, near the southern end of Lake Titicaca, about three hundred miles away from Cuzco on the border of Bolivia. Here we find ruins which in a sense are more remarkable than those of Cuzco, because far more antique. The temples and fortresses of Cuzco date only from the eleventh century, or later, of the Christian era, when the Inca dynasty came to being ; those of Tiahuanaco and others are of unknown age, and doubtless were built by the Aymaras at the time of their greatest culture before their overthrow, or even by predecessors of those people. Some writers, indeed, have maintained that they were contemporaneous with Babylon or Assyria. But be it as it may, they are of a different type to that which the Inca stone-shaping art produced, and they form the ruins of the oldest city in the New World, here upon this high, bleak, sterile plateau of Titicaca, more than two miles vertically above





Near Cuzco is an enormous stone which had been abandoned on the road, and an Indian tradition says that the stone "wept tears of blood" at being left there. These great stones of Tiahuanaco, unlike the Inca walls, are in some cases very richly carved. The most remarkable of them is the monolithic doorway of Akapana, carved with a kind of frieze in bas-relief of figures, the central one of which has been taken by Peruvian archæologists to represent the mystic deity Huirakocha. Some of the lesser figures have human bodies, hands, and feet; some human heads, others heads of condors; some wear crowns and carry sceptres, and they appear to be in an attitude of adoration of the central figure, which itself holds sceptres, carved with the heads of tigers and condors, which were probably symbolical of strength and power. This central figure of Huirakocha (or Viracocha) was the supreme god of the Andine people, typical of the "Abyss of the Waters," as was "Ea" among the Chaldeans. Among other notable monoliths of this group is a stone image, about twice the height of a man, which stands upon the plain. One hand of the figure holds a fish sculptured against its breast, a feature of much archæological importance, to which reference is made elsewhere. An analogy has been drawn by some observers with the remains on Easter Island, later described.

It is a regrettable thing that these ruins of Tiahuanaco are being destroyed, forming, as they do, one of the most interesting chapters in the

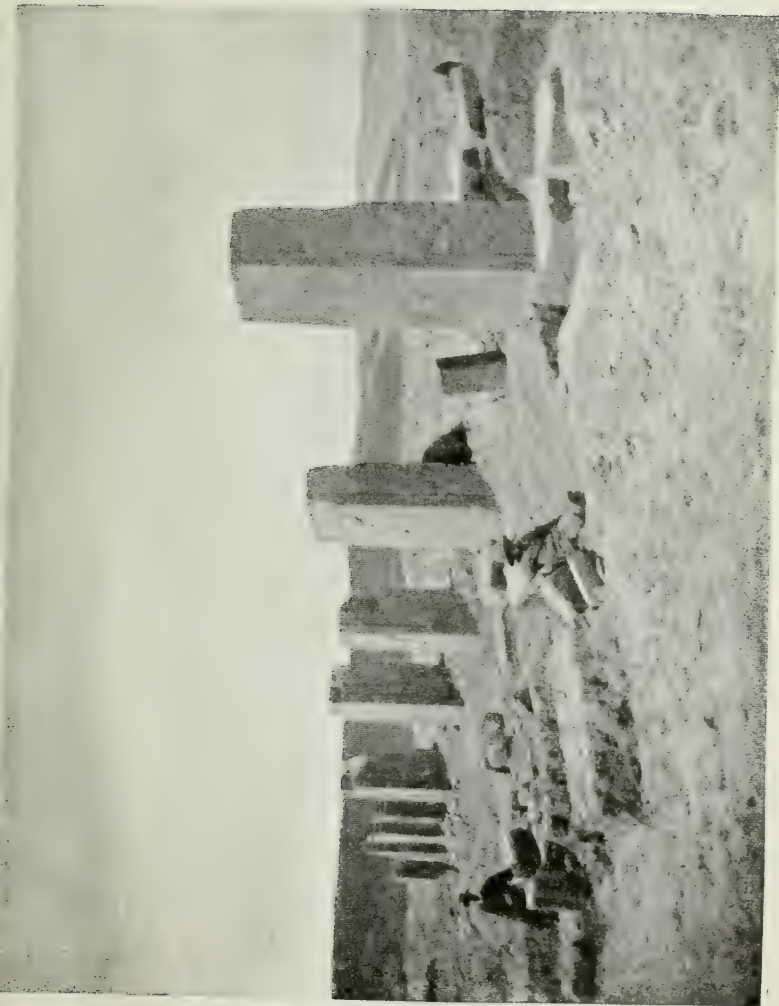
little-known history of early Peru. The buildings have been ruthlessly despoiled of their stones, first by the Spaniards for church-building, and later by modern vandals, especially the builders of the Guaqui-La Paz railway, who, it is stated, "have taken away within the last ten years more than five hundred trainloads of stone for building its bridges and warehouses."<sup>1</sup> Many valuable antiquities, however, are preserved in the Bolivian Government Museum at La Paz.

Both Cuzco and Tiahuanaco can be reached by rail, the former place being now the terminus of the new extension of the line.

Upon the islands of Lake Titicaca there are other remarkable ruins, both Inca and pre-Inca. From this island it was that Manco Capac, the first Inca, whose virgin birth as a redeemer of man is part of the Inca mythology, set out to civilise the savage tribes of the Andes, as before described. There are other remains on this island, as also upon that of Coati, ruined temples to the sun and the moon. In the Titicaca region there is also the remarkable ruin known as the "Temple of Huirakocha"—huge walls which probably were never completed; work of the Aymaras, upon which possibly these people were engaged when overthrown. For further descriptions of these places the reader may be referred to my other books,<sup>2</sup> and to those even more detailed works of other authors.

<sup>1</sup> "Across South America," Bingham, 1911.

<sup>2</sup> "The Andes and the Amazon," London, 1907. Also "Peru."



RUINS OF TIWANACO, BOLIVIA.

The most ancient building in the New World.



Still in Southern Peru there are other extensive ruins of Inca towns and fortresses, of which but little is known. Among these may be mentioned that of Choquequirau,<sup>1</sup> an Inca structure with some similarity to that of Huanuco Viejo, later described.

Recently explorations<sup>2</sup> have been undertaken in Peru, and further discoveries or examinations of little-known ruins are being made, and knowledge of these matters may be extended. Explorations in these regions have a certain advantage, in that the Inca and pre-Inca remains of buildings are generally situated in rocky places uncovered by vegetation, and not, as in the case of Babylonian and other remains, covered up by drift or sand or by volcanic ash. The main difficulties of their approach consist rather in their inaccessible and remote positions.

There are many other remains of the megalithic structures of Inca and pre-Inca times scattered about the Sierra or mountain region, including those almost obliterated ones at Ayacucho; and at Huaitara, between the Titicaca region and the coast, are some sculptured monoliths to which little attention has been paid. In the northern part of Peru the Inca remains become abundant, and they, as well as the coast ruins, are considered in the following chapter.

Mention has been made of the religion of the Incas. They were sun-worshippers, but this embodied, or was part of, a chaste and earnest

<sup>1</sup> "Across South America," Bingham, 1911.

<sup>2</sup> The Yale Expedition, see Appendix, 1911.



## CHAPTER X

### PERU—THE LAND OF ENIGMAS

Northern Peru—Quito—Huaraz and Cajamarca—Pre-Inca remains—The Upper Marañon—Castle of Chavin—Subterranean chambers and monoliths—The “Gentiles”—The ancient fortresses—The *andenes*—Former population—Ruins of Huanuco Viejo—Beautiful stone doorways—The Inca palace and fortress—Ancient town—Analogy with Egyptian structure?—Cliff-towers and graves—Caves and mummy-cellars—The ancient ruins of the coast region—Pachacamac—The only example of columns—The Chimus and ruins of Chan Chan—Incas and pre-Incas—Copper tools—Roofs—Embalming the dead—The Huacas—Mummy-hunting—Peruvian pottery seven thousand years old?—Beautiful ceramic art—Asiatic origin?—Mongolian ancestors—Analogies with China—Mysterious unread hieroglyphics.

THE region last described, that which has Cuzco as its centre, is enormously removed, of course, from Central America and Mexico, but the Inca Empire and the pre-Inca culture extended northwardly from the Titicac region, its real home, for more than twelve hundred miles to Quito, in Ecuador, and it is not difficult to conceive that there may have been some communication between the Inca and the Maya cultures, as hinted elsewhere.

It is the northern extension of the Inca empire

that we must consider here. Huaraz and Cajamarca are two important cities in this region, the first being some four hundred miles and the second some six hundred miles from Cuzco, both on the road to Quito, yet another four hundred miles beyond. Portions of the Inca road still serve as modern trails, and, indeed, the trails have been scarcely improved since the horses of Pizarro's band first ascended the Andes.

Huaraz is a typical interior Andine town, 10,000 feet above sea-level, and overhung by the snowy Cordillera to the east. Three days' mule-riding, over some of the most execrable trails in the world, reaching an elevation of 14,000 feet, take the traveller into the valley of Huaylas, where Huaraz is situated. The town can also be reached by a three-days' journey, over roads equally bad, crossing the main range of the snowy Cordillera, from railhead at Cerro de Pasco, the terminus of a branch line of the Oroya railway. I explored an untried pass over the perpetual snow-cap near Huaraz at the request of the authorities, for the purpose of construction of a new road.<sup>1</sup> A railway has long been planned for the valley of Huaraz or Huaylas, but has never been carried out.

There are many vestiges of the Inca and pre-Inca cultures in this neighbourhood. At Huaraz existed a square fortress formerly, with sculptured walls "showing figures of men greater than natural size. Also the animals and flowers carved upon the walls and other ancient ruins

<sup>1</sup> See "The Andes and the Amazon."





RUINS OF HUANTUCO VIEJO,

*(Drawn on the spot by the Author.)*

Inca Palace.



are tokens of great antiquity.”<sup>1</sup> The aboriginal empire of the pre-Incas must have been strongly established in this neighbourhood. Into the adobe walls of the cemetery at Huaraz are built ancient stones with Inca masks, and a few miles away is a singular underground chamber, which I examined, and from which some gold and other objects, including sea-shells, were taken.<sup>2</sup>

The region of the Upper Marañon is still more remote—two days’ ride from Huaraz to the east. Upon the way an Inca pass of rock-hewn steps is traversed, at an elevation of nearly 15,000 feet above sea-level, and this range forms the water-parting of South America.<sup>3</sup> Descending thence to the east, we reach a small affluent of the Marañon, spanned by a monolithic Inca bridge, with sculptured heads built into the pillars, and approach the Castle of Chavin. This castle, which I examined, is largely in ruins, but there are numerous singular underground chambers and passages, the purpose of whose construction it is difficult to understand, and time did not permit me an extended exploration. The walls are of blocks of hewn stone. But the main point of interest here is the singular carved monoliths, doubtless of pre-Inca origin, which exist or existed here. One of these, a beautifully carved stone about twice the height of a man, was transported over the Andes and down to Lima, on the coast, where it stands in the Exhibition Park. Another, in the form of a column,

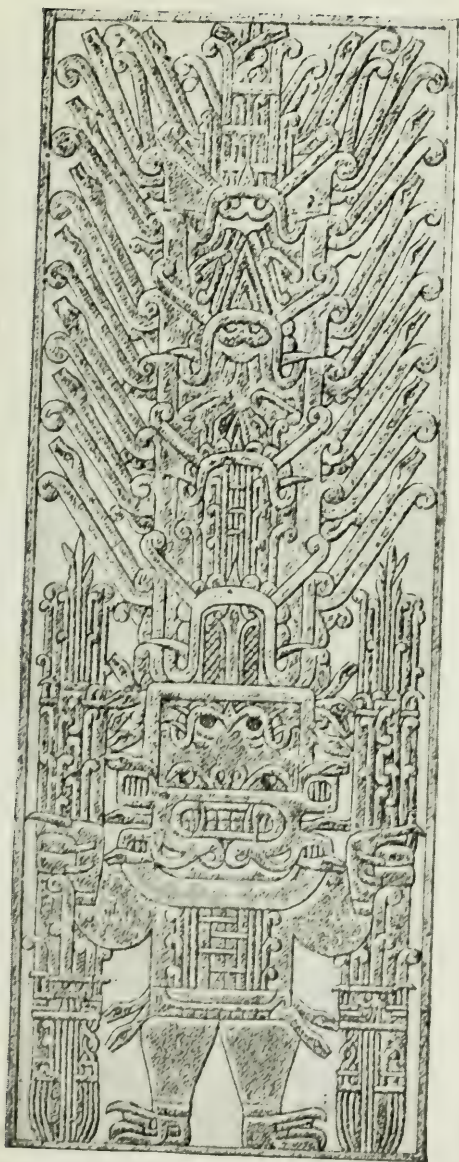
<sup>1</sup> “El Peru en 1906,” Lima.

<sup>2, 3</sup> Illustrated in “The Andes and the Amazon.”

with carved snake-heads upon it, yet remains in place in a subterranean chamber, and there I examined it. Chavin is of the pre-Inca period, or at least these bas-reliefs are.

The whole of this remote region of the Upper Marañon is dotted with the ruined dwellings of the former occupiers of the land. Houses, terraces, fortresses, of unhewn stone, sometimes in the most inaccessible positions, upon high ridges, towards which the night-mist from the Marañon rolls up in fleecy folds like a mysterious pall, and from it these ruined castles and walls start suddenly as we behold them, like the ghosts of the dwellings of a vanished race—which indeed they are—weird and unique. I have, upon my expeditions with my men and mules, often been obliged to sleep in these ruined places, sheltering from rain and snow, in the absence of other habitation. The disposal of these numerous ruins, often about a central fortress commanding the heads of valleys, and surrounded by the abandoned *andenes* or terraced fields of these people, goes to show that the inhabitants lived as clans, or "Gentiles," and their ruined dwellings are termed by the Indians of the Andes to-day "casas de los Gentiles," or "houses of the Gentiles."

These *andenes*, or one-time cultivated terraces, are a striking feature of the Andes; they were so termed by the Spaniards, and have furnished one origin of the name of the mountains. I have journeyed among these interminable slopes in many parts of Peru, and marked the



BAS-RELIEF FROM CHAVIN, NORTHERN PERU,  
OF FIGURES WITH SCEPTRES.



vestiges of ancient cultivation on the sides of these profound and interminable valleys, where only scattered Indian hamlets and mouldering ruins exist to-day. This part of Peru offers no field for the mere tourist. There are no approaches to it by railway, such as at Cuzco and Tiahuanaco. The traveller whose fortune it is to traverse the remote region of the Andes of Peru and Bolivia, but especially of the former country, will constantly be reminded of the existence of a population long ago, where to-day all is silent and desolate. Nothing has more strongly impressed me in the long periods spent in those elevated regions than the evidences of the intensive way in which the soil was cultivated by the early Peruvians. Sitting astride our mules on some high ridge as the sunset shadows fall athwart those little-known valleys of the great Cordillera, we may mark how the declining light touches the inequalities of the distant slopes, giving a singular rippled or chequered appearance. This effect is caused by the innumerable terraces or *andenes*, the small fields, one above the other up the precipitous hillsides, fashioned in a way such as must be seen to be believed.

The *andenes* are formed by the method of excavating the soil on the upper side and embanking it on the lower, the earthwork thus levelled being surrounded on three sides with rough masonry retaining walls, slightly battered, as in the case of all stonework of the Inca period. Above the first *anden* a second was made, fol-

lowed by another, and so on until the whole mountain-side was covered, like a gigantic flight of stairs. In some districts every hill-slope is or has been so covered, and the terraces must have numbered millions. The lowest of these terraces are naturally the largest, in conformity with the usual slope of a hill, and they diminish in size as they go upwards, ascending thousands of feet often, from the level of plains and streams up to where they are hidden in clouds and mists. In some cases, on the steep ravines or semi-precipitous slopes the top terraces are of a size such as gave room only for two or three rows of maize, so industrious were the people and so highly was land considered. Moreover, they were served by an irrigation channel, and these, as before mentioned, were at times many miles in length. A conduit of this nature must be of a considerable length necessarily, to "gain altitude" from its source in the river. These terraces and aqueducts are found throughout Peru and the Andine region generally.

As we regard these evidences of past handiwork we shall reflect that a population that carried out such enterprises must have been far more numerous than the scanty inhabitants of the Andes to-day. Indeed, it has been calculated that the population of the Inca Empire at the zenith of its fortunes might have reached 90,000,000. This is palpably an absurdity ; but there can be no doubt—and it is, in fact, a matter of history—that a population many times greater than the 3,000,000 of Peru to-day must have



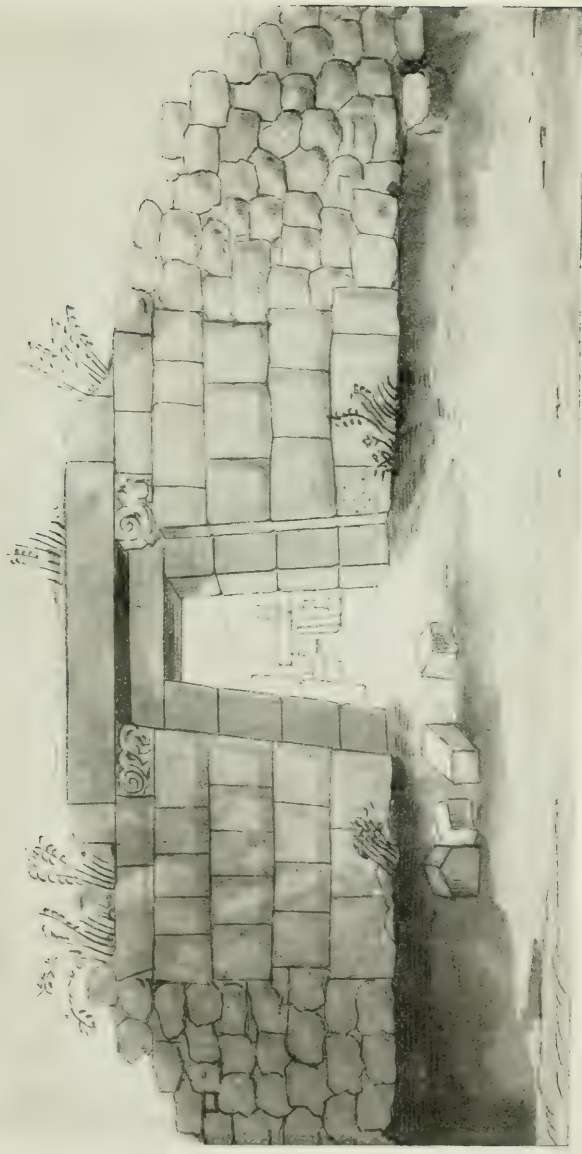
had their being in those mysterious uplands, where, since the advent of the Spaniard, only scattered villages and mouldering ruins exist.

The principal group of ruins in this part of Peru, apart from Chavin, is that of Huanuco Viejo, of which I made a special study. It stands upon a broad, flat plain upon an arm of the Marañon, at an elevation of about 12,000 feet above sea-level, and consists of an extensive palace, a fortress or temple of the sun, baths, and an extensive village of streets, with a singular series of round and square dwellings, alternating, in long rows. The chief architectural feature of the buildings is a series of stone doorways, really beautiful examples of Inca masonry, and the castle or temple. In the palace there are six of these doorways, all standing in a line at considerable distances apart, so that the observer who takes his stand in front of one of them is enabled to see through the whole series. The line so taken through them is about east and west. The total length across the courtyards or halls to which these doorways give access is about 400 feet. The doorways are of typical Inca tapering or trapezoidal form, with quoins and lintels of beautifully fitted stones, the latter of the more or less polygonal form previously described, and so closely fitted that a knife-blade cannot be inserted in the joints. No mortar has been used. The lintels are monoliths of nearly 7 feet in length in some cases, and the thickness is about 3 feet, which is that of the walls of which they form part. The characteristic

niches, also of trapezoidal form, are a marked feature of the walls of these ruins. The same niches are found elsewhere in the Inca buildings, as, for example, at Ollantaytambo.

The castle, which stands in the centre of what was a huge square, around which the palace or palaces are disposed, is a building of different character. It is rectangular in form, about 100 feet wide and 170 feet long, very solidly constructed of cut stone blocks surmounted by a cornice, whose moulding is composed of a fillet and cavetto, as in the Doric order. The whole plain in the vicinity is covered with the ruins of small habitations, generally of unhewn stone. All the masonry of these ruins is composed of blocks of silicious limestone, which have been extracted from a stratified hill at the edge of the plain. In this castle or temple, whichever it were, some similarity to Egyptian form may perhaps be traced.

This plain and its hills, and the ruins of the palaces, castles, and dwellings are absolutely uninhabited, except for an occasional Indian shepherd, and these, I was informed by my men, occasionally vary that occupation by horse-stealing. I pitched my tent under the shelter of the palace walls, and in the night a commotion among my mules seemed to suggest that some prowling robber might be about; and as a warning I lifted up a corner of the tent canvas and fired a couple of revolver shots up into the night air. When morning dawned we found tracks of sandalled feet, but nothing was missing.



RUINS OF RUANUCO VIEJO.

*(Drawn on the spot by the Author.)*

Doorway to the Inca Palace.



I sketched the chief features of the place, and rode along the abandoned streets of the Inca village, where even as late as the time of the Conquest, it was stated by the brother of Pizarro, who visited them, the Incas maintained a population of 30,000 souls. Now the wild oats wave above the entablature of the palace of the Incas, and the declining rays of the sun fall softly across the ruined walls as I ascend the range of hills above the Marañon. These ruins of Huanuco Viejo are of much interest, and, as far as I am aware, they had never been previously depicted.<sup>1</sup> My photographic films had become exhausted, and I have only my sketches to illustrate them, which, however, were made with exactitude. One remarkable fact we must recollect with regard to these great stone structures of the high plateaux—they are in a region at a vast elevation above sea-level, where there is little vegetation, absolutely no timber, except a few bushes in the ravines, and where corn or other cereals will not ripen.<sup>2</sup>

Beyond this point the old Inca highway descends to the river by a stairway of rough-hewn stones and traverses an arm of Lake Lauricocha, the main source of the Marañon, over a stone causeway of Inca construction. On every hand are the remains of the *andenes*, some of them still cultivated, whilst the ruins of the

<sup>1</sup> They were, however, visited by the well-known Peruvian traveller Raimondi half a century ago.

<sup>2</sup> For plans and further sketches of these ruins, see my paper in the *Journal of the Royal Geographical Society*.

old clan castles where these sturdy highland chiefs lived, either previous to or contemporaneous with the Inca regimen, catch our eyes at every turn. Round towers and square towers on the edges of beetling cliffs we mark, and a mysterious row of towers on a hilltop, practically inaccessible, whilst amid crags and rock-strata are Inca burial-places, tenanted by skulls and bones. The Indians often fear to enter these caves and cellars, and at times earnestly advised me not to do so, averring that some evil befalls those who meddle with the resting-places of the dead. The same experience befell me indeed in Mexico, and naturally the thoughtful traveller behaves with the utmost tact in such circumstances.

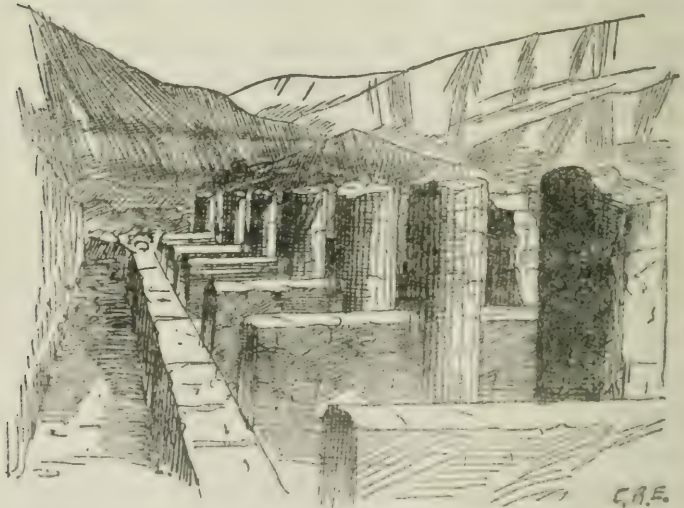
Cajamarca lies much more to the north and is reached from the coast. A line of railway was begun long ago from the seaport, but died a natural death after crossing the coast-zone and reaching the base of the Cordillera. It was here that Atahualpa, the last reigning Inca chief, was treacherously betrayed by Pizarro and barbarously done to death, notwithstanding the "golden vessels of Jerusalem," or rather Cuzco, that had been desecrated for his ransom, and conveyed thither from all parts of the empire to fill his prison chamber.

We must now leave the highlands or Sierra, and descend to the lowlands of the Pacific, and here very different climatic and topographical conditions await us. Here are rainless deserts and irrigated valleys; the Andes are but a faint,

grey, serrated edge on the eastern horizon, and on this flat littoral it seems impossible that we had battled with icy gales two or three miles above the level of the sea, or traversed those high, bleak *punas* on the roof of the world.

The principal ruins of the Incas, pre-Incas, and other semi-civilised former occupants of the coast, are mainly of buildings constructed of adobe, and have remained—where they have remained at all—due to the dry climatic conditions as before mentioned. The most famous of these ruins formerly was that of Pachacamac, which at the time of the Conquest was a splendid temple raised to the “Unknown God,” and great spoil of golden vessels and plates was secured from this place by the Spaniards in the ransom of Atahualpa. The name “Pachacamac” signifies in Quechua—the language of the Andine people — “He who gives animation to the Universe.” To-day nothing remains of this great temple but a mound of rubbish, a day’s ride from Lima. Proceeding along the coast-zone to the south, we shall reach a group of ruins known as “Incahuasi” or “the house of the Inca.” These, unlike the coast ruins generally, are of stone, although they lack the beautiful workmanship of the mural remains we have visited in the Andes. But they are unique in one respect—they contain a row of columns. This is an architectural feature absolutely lacking in the Inca and pre-Inca ruins elsewhere, for, except in this case, the column was apparently unknown to the Andine people, as was the

arch. The columns of Incahuasi are not monoliths, however. The building probably dates from the fifteenth century. Still farther to the south, slightly inland from the port of Pisco, we encounter an extensive group of adobe ruins in a good state of preservation, consisting of long walls with characteristic trapezoidal-formed doors and niches, and corridors, halls, and rough



RUINS OF INCAHUASI.

stone foundations. I took a careful sketch of these features. The niches are still covered with some red pigment, possibly vermilion from the great quicksilver mines of Huncavelica (which I visited), in the Andes to the east, for vermilion was obtained from the cinnabar to paint the faces of Inca beauties, we are told by Garcilaso, the Inca historian.

Still farther south in this coast-zone of Peru







RUINS OF CHAN CHAN, COAST OF PERU.

I encountered remains of long aqueducts, a line traceable for eighty miles along the hill-slopes, for the Incas were expert in hydraulics and irrigation works. There are other long ruined aqueducts in other parts of the country.

In the northern part of the coast-zone we come to the region where the Chimu people flourished, who were overthrown by the Incas. They were a powerful, semi-civilised coast people, and numerous ruins attest their skill in mural construction. Among these the most notable are the ruins of Chan-Chan, whose walls show florid decorations, elaborated in cement.<sup>1</sup> These ruins are not far from the modern city of Trujillo, and would repay careful study. It is interesting to compare the decorations of these walls with some of the patterns on ancient Egyptian costumes, and with those on Persian carpets, and to endeavour to trace a similarity in their form. Very recently a great quantity of pottery, of the pre-Inca period and of the most beautiful workmanship was unearthed in the Chicama Valley in this district, mentioned elsewhere, its age being conjectured at seven thousand years.

As we have seen, the Inca and pre-Inca architecture differ much to those who have made a study of them. The first lack any iconographic carvings, such as we have seen at Tiahuanaco and Chavin, whilst in the latter we do not observe the polygonal-shaped wall stones. Monoliths of considerable size were common to both; one of those at Cuzco is 27 feet long,

<sup>1</sup> See illustration.

15 feet wide, and 12 feet long, and there are others of almost equal size. The stones vary as to their geological composition according to the region; some are of granite, as at Cuzco, some of trachyte, sandstone, or basalt, whilst others are of a hard, silicious limestone. It is to be recollected that this remarkable stone-shaping was performed without the use of iron; but the Incas possessed bronze, termed *chumpe*, and copper tools, examples of which are occasionally recovered in the ancient quarries. Indeed, they were skilled metallurgists in copper, gold, and silver, as more fully described in a subsequent chapter. "Analysis of their copper or bronze has given 93 per cent. copper, 6 per cent. tin, and 1 per cent. silica." <sup>1</sup> These metals, it will be recollected, are abundant in Peru, Bolivia, and Chile. As regards stone-shaping, there is a curious legend among the Indians that the Incas were able to mould stones by means of using the juice of some herb.<sup>2</sup>

As previously stated, the Incas were unacquainted with the arch, but nevertheless they constructed dome or "beehive" roofs, both to their tombs, at times, and to their conical houses, whether of stone or adobe. They also employed the principle of corbelling-out over openings, and to form the abutments of small bridges. In general terms the principal characteristic of the Inca architecture is its great solidity. It would seem that the builders were animated by religious

<sup>1</sup> "El Peru in 1906," Lima.

<sup>2</sup> See my "Andes and the Amazon."

motives and by the desire to bequeath to posterity these chapters in stone of their history, and, indeed, it is safe to say, that these may be expected to outlast any of the modern structures of America, whether the architectural work of colonial Spain—good and solid as this is generally—or whether the “skyscraper” system of the Anglo-Saxon on the Northern Continent. Solid as these walls are, however, the roofs of the large buildings have perished long ago, as their builders do not appear to have been able to advance beyond sloping roofs of poles covered with grass thatch, or, at any rate, in the absence of anything else we can only assume this to have been the case. Their buildings, with small exception, are never of more than one story. Nor were they acquainted with the use of burnt brick, although their ceramic art was an advanced one, as we know from the beautiful and abundant Inca pottery. In the shape of their vases (as well as in the form of some of their buildings) they showed a curious knowledge of acoustics. There were no doors to the houses, the openings being covered with a mat, and, indeed, there could have been little of comfort or luxury, in the modern sense, about these habitations. The interiors of the temples were sometimes covered with plates of gold, of which the Spaniards secured great booty.

It is held to be a mystery how the early Peruvians embalmed their dead. The bodies of the Inca emperors, “according to eye-witnesses and the Spanish historians, still preserved the features

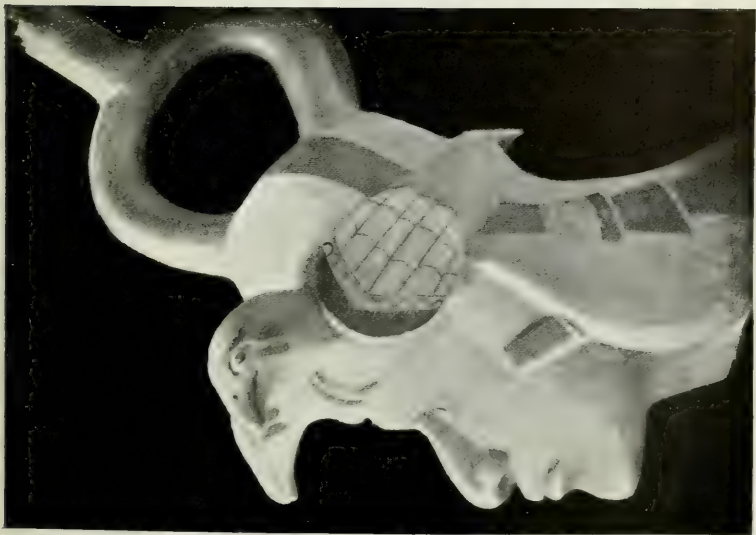
unaltered, the skin smooth and soft, and the flesh in its entirety after the lapse of centuries." <sup>1</sup> Mummies were sometimes left in a sitting posture, in caves. The burial-places and mummy cellars of these people are found all over Peru. Innumerable small square chambers, built of rough stone, are generally the receptacle of the mummies, and to-day these *huacas* are constantly discovered, when buried, by the method of sounding the earth with an iron rod, when the lack of resistance encountered indicates the presence of a mummy. Numbers of these places exist, both on the coast and in the mountains.

The earliest evidences of man in Peru are in kitchen-middens and fireplace stones on the coast. At a much later period, but whose date it is impossible yet to fix, there existed on the coast, especially between Samanco, in the north of Peru, and Nasca, in the south, groups of civilised tribes of whom nothing is known, except from their ceramic utensils and textile fabrics, found in the deepest layers of the soil.

As to pottery, this is very plentiful, and of beautiful form. A remarkable find of beautiful pottery in great abundance recently, shows how advanced these pre-Inca people must have been in ceramic art. The illustrations given here are of those unearthed in the Chicama valley, near Trujillo, three or four years ago.<sup>2</sup> The date of this pottery was conjectured as a very remote one, but that it was of so great an age remains

<sup>1</sup> "El Peru en 1906," Lima.

<sup>2</sup> By Mr. Myring.



POTTERY FROM PRE-INCA TOMB, CHICAMA VALLEY, COAST OF PERU.





to be proved. "The 750 examples of prehistoric pottery prove that there existed on the western slopes of the Andes, some seven thousand years ago, a civilisation that was of a much higher type than any that had been thought possible. The pottery dates, it is claimed, from 5000 B.C.; some are inclined to date it as far back as 10,000 B.C." ; says one account.<sup>1</sup>

This pottery was taken from a tumulus, some three miles in extent, which was found to contain about two thousand graves of the Chimus people. Much of it is exceedingly beautiful and curious, and its delicacy of colouring, high finish, and remarkable state of preservation are noteworthy.

As regards Peruvian pottery in general, of the pre-Hispanic period, the pieces commonly unearthed from the sand and tombs are veritable works of art, and the traveller will be unable to resist the temptation to form a collection. He must beware, however, of the beginnings of a spurious art in imitation.

It may have been that the coast civilisation preceded that which proceeded from Tiahuanaco, the main centre of the pre-Inca culture, although the similarity of design on the pottery and fabrics unearthed at both places shows that they may have been allied. This civilisation, which was responsible for the pre-Inca buildings, must have advanced as an immense wave over the whole of the Peru of to-day, reaching on the north

<sup>1</sup> From a description in the *Illustrated London News*, December, 1909.

beyond Ecuador as far as Columbia and on the south to Chile, and to the east as far as Tucman and the Gran Chaco in the Argentine Republic. What of its origin? "As regards the origin of the tribes or people which came to Peru and inhabited it, after men whose traces we find along the coast in kitchen-middens, &c., the greater part of the persons who have studied the matter in all its bearings have come to the conclusion that they were of Asiatic origin. We may reasonably attribute an Asiatic origin to the first half-civilised people of our soil. Moreover, many physiognomic peculiarities of the Indians betray their Mongolian origin and make them similar to the Chinese and Japanese, to which families they perhaps belong. In corroboration of this supposition we have surprising similarity between the adornments and artistic patterns which we meet with in the woven textures and pottery-work of the ancient Peruvians and those of the Mayas, who occupied the whole peninsula of Yucatan, as well as part of Chiapas and Tabasco, to whom the men of science in Mexico attribute likewise Mongolian origin." <sup>1</sup>

This supposition also gains force, according to the above writer, from the analogy of some of the customs of the ancient Peruvians with those of the Chinese. Agriculture was the basis of social administration both of the Chinese and the early Peruvians. During the rule of the empire of the Incas great festivals were celebrated, that of Hatun Raini and of Capaccocha,

<sup>1</sup> "El Peru en 1906," Lima.

at the time of the equinoxes and solstices ; the former to render thanks to the Supreme Being—that is, the sun in the Inca belief—for benefits received, and the latter to pray for a fruitful following season. At one of these festivals the Inca Emperor ploughed with his own hands a piece of sacred land, just as during similar festivals in China the Emperor ploughs (or did plough) consecrated ground with a silver plough.

Whatever may be the value of these analogies it is evident that Peruvians of to-day believe, to a large extent, that their country in early times was peopled from Asia. There are other evidences of very remote happenings in this vast region of the Pacific and the Andes. On the hills near Tacna in Tarapaca, between Peru and Chile, are “ the remains of hieroglyphics of enormous dimensions, perfectly visible at a considerable distance, written in vertical lines, like Chinese writing. At eight leagues to the north-west at Arequipa may be seen engraved upon granite, on the heights of La Caldera, figures of men and animals, straight and curved lines, parallelograms, and even certain kinds of crosses and letters. Time has blotted out a number of inscriptions, but a great many are still sufficiently visible. The situation of these hieroglyphics in solitary spots, devoid of any ruins in their vicinity, or of any tombs corresponding to the Inca civilisation, proves that they were carved previous to the empire and that they are evident signs of the existence of a very ancient civilisation.”<sup>1</sup>

<sup>1</sup> “ El Peru en 1906,” Lima.

In the discussion upon a paper which I read before one of the learned associations of London,<sup>1</sup> some of the speakers compared certain similarities of ornament and construction in the views shown on the screen with outside sources, such as the "extraordinary resemblance of some of the walls to those in Greece, as also what was known as the Greek fret, which, however, existed in other countries independently." Another speaker drew some analogy with the Cyclopean walls of the prehistoric cities of Mycenæ and Tiryns, and the legends of the Argives as to their building. Such analogies were, however, doubtless romantic.<sup>2</sup> It is, perhaps, worthy of mention in passing that the polygonal-shaped wall stones of the Inca masonry, as depicted at Cuzco and Huanuco Viejo, &c., are seen in Japanese walls.<sup>3</sup>

As to the "Greek" pattern, pictured elsewhere<sup>4</sup> the exact form of the Peruvian and Mexican design is common as a decoration around the pedestals of idols in some parts of China to-day.<sup>5</sup>

In a subsequent chapter Peruvian-Asiatic analogies are further advanced and discussed, with arguments both for and against.

<sup>1</sup> Architectural Association, November, 1909.

<sup>2</sup> See *Architectural Association Journal*, January, 1910.

<sup>3</sup> For an example see *Awake*, magazine of the Church Missionary Society, December, 1911, "Japanese Temple."

<sup>4</sup> P. 244.

<sup>5</sup> See illustrations in "Present Conditions in China," *National Geographic Magazine*, Washington, December 1911.



PRE-INCA POTTERY FROM TOMB IN THE CHICAMA VALLEY,  
COAST OF PERU.



## CHAPTER XI

### A PREHISTORIC SOCIALISM

A remarkable social system—The Inca land laws—"Superior to all Christian nations"—Small holdings in early Peru—The land for the (prehistoric) people!—No beggary permitted—Common ownership of natural resources—The guano—Public water rights—No monopolies allowed—Inca hydraulics—Wonderful irrigation system—The *andenes*—Socialistic agriculture—Neighbourly assistance—No Tammanyism!—Help for widows—Tax-payments in goods and labour—Boots instead of rates—Hallelujah—Public granaries—Precautions against famine—Corn reserves—Scientific colonisation—The fall of the Inca socialism—Hints for Britain.

IT is a remarkable thing that in the remote fastnesses of a huge mountain system of a continent unknown to the civilised world of Europe and Asia four hundred years ago, the Andes of South America, a civilisation of so unique and beneficent a character should have existed as caused one of the most famous of the historians of the Conquest to exclaim that "laws so beneficent have never been enjoyed by any country under any Christian monarch, or under any kings whether of Asia, Africa, or Europe."<sup>1</sup> These things are not exaggeration ;

<sup>1</sup> Garcilasso de la Vega.

proofs and records of the Inca social system sufficiently establish their truth.

Before leaving Peru, therefore, let us cast a glance at the land laws, system of tax payments, disposal of national, natural, and Imperial resources, colonisation, fraternity, and so forth, of the Inca Empire—matters not without value for consideration by the empires of the twentieth century.

Most important of all, perhaps, were the land laws—those concerning land tenure and cultivation. The Inca emperors, directly they subjected a new territory—and it is to be recollected that they increased their possessions enormously by conquering the surrounding more or less savage tribes of the slopes and uplands of the Andean regions—immediately instituted the equitable system of land tenure of their own homeland. The land was first measured and divided into three sections: the first part for the sun, the second for the king, and the third for the people<sup>1</sup>—that is to say, Church, State, and people each received its share. This system was carried out in every province and village, care being taken that there should be an excess rather than an insufficiency of land for the inhabitants of each and every such district. When the population increased land was taken from the areas belonging to the sun and the king and allotted to the people, the sun and king retaining in their share such lands as were desert or uncultivable.

<sup>1</sup> See Garcilasso, "Rites and Laws of the Incas," Hakluyt Series, Markham's translation.



To each married peasant was granted an area of land sufficient for his maintenance, called a *tupu*, which was regarded as the unit of measurement. When children were born a further area was granted, in the ratio of one *tupu* for each boy and half a *tupu* for each girl. Upon the boy's marriage the *tupu* was handed over to him but the girls, when married, did not take their *tupu*, which remained with the father or reverted to the State.

*No one was allowed to buy or sell land. It reverted to the State on the death of its owner.*<sup>1</sup>

Thus, under the Inca system the important principle was observed that every individual had a right to his or her area of land; that land was the property of the community, and could not be privately monopolised or looked upon as a merchantable commodity.

No less were natural resources forbidden to be monopolised, as is well shown by the laws for the use of the valuable land fertiliser known as *guano*, a peculiar product of the Peruvian coast, and by the State ownership of gold-mines, &c.<sup>2</sup>

This *guano* is the product—the droppings—of the innumerable sea-birds which haunt the coast and islands of that part of South America. We can observe them from the deck of the steamer to-day, flying low on the surface of the water in such numbers that they appear like

<sup>1</sup> I venture to commend a consideration of this to our modern land-monopolists.

<sup>2</sup> This ancient matter of national ownership of national resources is one which modern nations might well consider.

clouds, and, indeed, must be seen to be believed. In the time of the Incas it was unlawful to molest these birds or trespass upon their grounds at breeding-time. The guano-covered land looks from a distance, as we approach the islands or promontories where it chiefly abounds, like peaks of snowy mountains, and in the coast regions it was used to fertilise the sterile soils.

These guano deposits were carefully assigned to certain districts, and marked out for the use of each village or locality, and any person who misappropriated the substance was punished.

As with the laws concerning land and fertiliser, so it was with those relating to water, that necessary concomitant of agriculture in the torrid zone, where irrigation is necessary due to the scanty rainfall.

In those parts of the country where the available supply of water was limited—and they embraced the vast region of the coast zone—the flow of streams was gauged and utilised with great care, conducted in irrigation conduits or channels, fashioned by Government engineers, and allotted to the agriculturist by measure. Experience had shown the necessary quantity of water required to irrigate each unit of land, and a time-flow was given for each in turn, “and neither the rich nor the noble, nor the friend nor the relation of a *curaca* [or petty chief], nor even the Minister or Governor himself, received any preference.”<sup>1</sup> Those who were too negligent or idle to take their turn and irri-

<sup>1</sup> Garcilasso, “Royal Commentaries of the Incas.”



PRE-INCA POTTERY FROM TOMB IN CHICAMA VALLEY, COAST OF PERU.



gate their land within the given time were punished.

The Inca hydraulic works included the building of dams for water-storage; and by works of this character they increased the capacity, in some cases, of the lakes which generally form the source of Peruvian coast rivers. They enlarged these lakes and led aqueducts therefrom. Works of the character which I have examined in the remote interior are of much interest. In some cases ravines were spanned by means of aqueducts, some of which are used by the natives to-day; and in the province of Nasca water for irrigation was conducted by subterranean channels.

The Incas were expert irrigationists, and their old channels and hydraulic works remain in many parts of Peru. Some of the canals formed for this purpose were many miles in length.

“The Inca emperors caused irrigation channels to be constructed, which were most admirable, as may be seen to this day,” Garcilasso wrote at the end of the sixteenth century. “The engineers led the irrigation channels in directions required to be watered, and they endeavoured to increase its fertility as much as possible. The Incas supplied the water with much ingenuity, and no maize crop was sown without being also supplied with water. They also constructed channels to irrigate the pasture-lands when the autumn withheld its rains, for they took care to fertilise the pastures as well as the arable land, as they possessed immense flocks. These channels were

destroyed as soon as the Spaniards came into the country, but the ruins may be seen to this day. In many places they led an irrigation channel for fifteen or twenty leagues to irrigate only a few fanegas of maize-land, that it might not be lost."

The fanega is equal to about one and one-tenth acre. The flocks, of course, were of llamas and alpacas.

I have spoken elsewhere of the remarkable system of terracing the mountain slopes to form agricultural land—the *andenes*, as these terraces were termed by the Spaniards; and it was partly to irrigate these hanging fields that the irrigation canals were formed. Many of the *andenes* belonged to the Inca and to the sun, because the emperors had ordered their construction. Lands not capable of irrigation were nevertheless made to yield good products, such as potatoes and other edible roots, whilst the *quinua*, a valuable cereal of the Andean regions to-day (*Chenopodium quinoa*), a seed something like rice, was planted with the maize often in the colder lands. In barren coast lands fish was used as a fertiliser, grains of maize being planted in holes with dead fishes.

If the methods of land tenure and its fertilising were beneficent and reasonable, no less were those connected with cultivation and harvest.

"They also established<sup>1</sup> a regular order in the tilling and cultivating of the land. They first tilled the fields of the sun; then those of the

<sup>1</sup> Garcilasso, *ante*.

widows, orphans, aged, and sick, for all these persons were classed as poor, and, as such, the Yuca emperor ordered that their fields should be tilled for them. In each village, or in each ward if the village was large, there were men deputed to look after the lands of persons who were classed as poor. These 'officers of the village' superintended the ploughing, sowing, and harvesting; and at such times they went up into towers the night before, built for the purpose, and, after blowing through a trumpet or shell to secure attention, cried with a loud voice that on such a day such and such lands of the poor would be tilled, warning those whose duty it might be to repair thither. If the poor had no seed it was provided from the Government stores. The lands of soldiers who were employed in the wars were also tilled in this way, like those of widows and orphans, for wives whose husbands were serving in the wars were looked upon as widows during their absence." <sup>1</sup>

After the lands of the poor and incapacitated had been attended to, the people cultivated their own holdings and rendered mutual assistance to each other; and the last to receive such was the *curaca*. Was there any favouritism or corruption shown in these operations, or "graft" set up? "In the time of the Emperor Huayna Capac a superintendent in the province of Chachapoyas was hanged, be-

<sup>1</sup> A useful hint for Britain, whose soldiers' families often are left in want, and whose old soldiers at times perish in destitution!

cause he caused the land of a curaca, who was a relation of his, to be tilled before that of a poor widow." <sup>1</sup>

"The Inca emperors ordered that the lands of their subjects should take precedence of their own, because they said that from the prosperity of their subjects was derived their faithful service, for if they were poor and in need they would not be able to serve well either in peace or war." <sup>2</sup>

The last lands to be cultivated were those belonging to the Sun, and the tilling of these was made the opportunity for festival and rejoicing, singing and general contentment. All the songs that were sung in praise of the Sun and the emperor were composed with reference to the meaning of the word *Haylli*, which, in the general language of Peru, meant "triumph." Thus they were said to triumph over the earth by ploughing it, so that it might yield fruit. The refrain of each couplet was the word *Haylli*, repeated as often as was necessary, and this seems to have been a species of "Hallelujah."

Among the most remarkable laws of the Incas were those concerning taxation. The principal feature of these laws was that taxes were not paid in money, but in work and in produce, whether manufactured or grown. It was held by the Inca emperors as unjust that taxes should be demanded in any form or commodity which

<sup>1</sup> Garcilasso, *ante*. There might be salutary lessons for the thriving American institution known as "Tammany" in these matters.

<sup>2</sup> Garcilasso, *ante*. A hint for British statesmen!



the people of any particular place could not produce by their own personal labour.<sup>1</sup>

“The principal tribute was to sow the lands, reap the crops of the Sun and the emperor, and to store them in the granaries, which were kept in each village. These granaries were constructed with great care. The crops of the Sun and those of the emperor were shut up in places apart. Throughout the empire there were three kinds of storehouses in which crops and other tribute were shut up. In each village, whether it was large or small, there were two storehouses. In one was deposited the provision which was stored up for the people, to guard against famine in years of scarcity, and in the other the crops of the emperor and the Sun.”<sup>2</sup>

These royal and religious deposits, however, were not squandered or monopolised, but were held in reserve also, against time of need, and seed for sowing was provided therefrom.

A noteworthy system concerning the payment of taxes in the product of the labour of the individual was in vogue.

“The people also paid another sort of tribute, which was to make clothes, shoes, and arms for the soldiers and the poor who could not work themselves owing to age or infirmity. In distributing and ordering this second tribute, the same rules were observed as in all other similar matters. The cloth in all parts of the Sierra

<sup>1</sup> Food for thought for our overtaxed classes to-day!

<sup>2</sup> Garcilasso, *ante*. A useful hint for Great Britain, as against starvation in war-time!

was made of wool from the innumerable flocks. On the plains of the sea-coast, where the climate is warm and they do not dress in woollens, they made cotton cloths, the cotton being provided from the crops of the emperor and the Sun. The shoes were made in the provinces where aloes were most abundant, for they were made of the leaves of a tree called *maguey*. The arms also were supplied by the provinces where the materials for making them were most abundant. In some they made bows and arrows, in others lances and darts, in others clubs and axes, slings and shields. In fine, each province furnished its own produce, without seeking in any strange land for what it did not yield itself, for no province had to supply anything that did not belong to it. Thus they paid their tribute without having to leave their homes." †

Amid this remarkable social system of the Incas was the beneficent mandate prohibiting beggary and destitution; and this, of course, followed upon due provision in their laws. Every citizen was considered to be provided for, theoretically and practically. No man need be idle, no man need lack land, or seed, or implements wherewith to cultivate it and make a living for himself and family, therefore no one was permitted to beg. If any were found doing so it was clear proof of idleness, not of lack of opportunity or physical incapacity, for, as shown, the incapable were provided for; and severe contempt and punishment

† Garcilasso, *ante*. Useful hints for the British taxpayer!

was meted out upon all tramps, vagabonds, and idlers."

Whilst we must extol the social system of the Incas, in as far as it provided for all its people and precluded the barbarous conditions of insufficiency and unemployment out of which society in the twentieth century is striving to emancipate itself, we must recollect that it was not a progressive system. The Quechuas and Inca-ruled tribes could not advance. They were but children living under the will of benevolent autocrats. They could neither choose their occupation nor even marry of their own free will. Such a system could not have endured, and whether, supposing it had not been destroyed by the Spanish advent, it would have developed the spirit of individualism of European nations, whilst retaining its valuable practices of community-rights, it is impossible to say. It has been rather unjustly urged against the Inca regime that it fell easily before a handful of invaders, and this has been used as an argument against "socialism." But it is to be recollected that its fall was largely due to the kingdom having been divided against itself at that period, and also the sudden effect of the horses and guns of the Spaniards upon a people who had never seen such before must be considered.

It is not to be supposed that the benefits of the Inca rule have been revived under the so-called republic of modern Peru. The Spaniards stamped out these splendid native laws of the aboriginal people, and the Peruvians of to-day

are largely the creatures of a somewhat feeble copy of European manners, in which land monopoly, and negligence and oppression of the poor Indian are among their worst defects. In Peru, as in all other Spanish-American communities, every petty official is more or less of a tyrant over the aboriginal race, who are deprived of their rights.

As to the land, it is held in great part after the unrighteous fashion of Europe, mainly by large land monopolists, except where it is too remote or inaccessible, as in the jungles or mountain region. Only there the Inca system has been to some extent preserved, and the native small-holding is inalienable by law. Of course, Peru is one of those countries with enormous areas of wild territory, much of it extremely valuable, and any citizen (or alien) may acquire a holding therein from the State.

## CHAPTER XII

### COMPARISONS AND CONTRADICTIONS

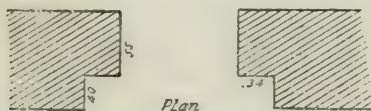
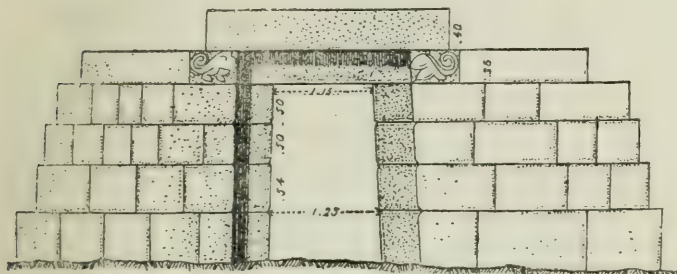
From Asia to America?—No iron or vehicles—Stone tools in early American arts—Remarkable stone-shaping methods—Indefatigable architects—Massive work—General characteristics—Moving the monoliths—Work on the high plateaux—Engineering knowledge in prehistoric America—The Pueblo ruins—Early explorers—Age of the Mexican and Peruvian ruins—No origin from Asia?—Cord-holders in masonry—Native gallows—Similarity of ground plans—Peru and Mexico compared—Columns in early architecture—The potter's wheel non-existent—Beautiful textile work—Native dyes—Killing home industries—Prehistoric metallurgy—Jewel-craft—Ore-smelting at Potosi—Admirable goldsmith's work—Abundance of gold—Spurious antiquities—Methods of historical record—Hieroglyphs and the *quipos*—Analogies with China, Tibet, and Tahiti.

IF it be true that the germs of civilisation and the arts were brought into America from Asia, it is certainly remarkable that such pre-historic immigration should have left behind some of the prime adjuncts of man's life and handicraft. The early Americans, as far as known at present, used no iron tools, notwithstanding that iron abounds in America; they had no wheat, they used no wheeled vehicles, nor, indeed, employed the wheel in any form, except in one instance as a spindle in weaving,

—although, of course, the absence of any beast of draught or burden—horse, ass, ox—would have rendered vehicles useless. Moreover, clever builders as they were, they did not know of the arch—that indispensable feature of scientific building.

Stone was quarried by the constructive people of early America by means of crowbars and picks of wood and bone. The silicious rocks were split with stone hammers, and broken and chipped into shape with bone tools. In the case of finished and polished stonework the material was chipped by blows, and ground smooth with other stones, and polished with fine material. Stones were sawed by the agency of sand or with a thin piece of harder stone, and boring or drilling was effected with the sand-drill. Even the hardest rocks were undoubtedly pierced with specially hard sand, and the patience expended on these operations is evident, and we see that stones were sawed, shaped, polished, carved, and perforated in any desired form. For building purposes stones were got out from the quarries, dressed, carved, and sculptured with stone hammers and chisels made of hard and tenacious rock. These implements are found still in the debris of quarries. Stone-cutter's tools of metal, as far as is known, did not exist, though, without them could they produce the results attained? Even mining was done apparently without, and I have recovered stone hammers and deer's horns from abandoned mines where they had been used in excavation.

We shall be forced to reflect upon the vast amount of time and patience which the early American of Mexico, Central America, and Peru must have employed in their stone-working. Companion stones in walls are not cubes in the Inca buildings, but of slightly polygonal form, involving the added labour of fitting to their fellows in the wall, as before described. More-



ONE OF THE DOORWAYS TO THE INCA PALACE,

INCA RUINS OF HUANUCO VIEJO,

(Measurements in Metres.)

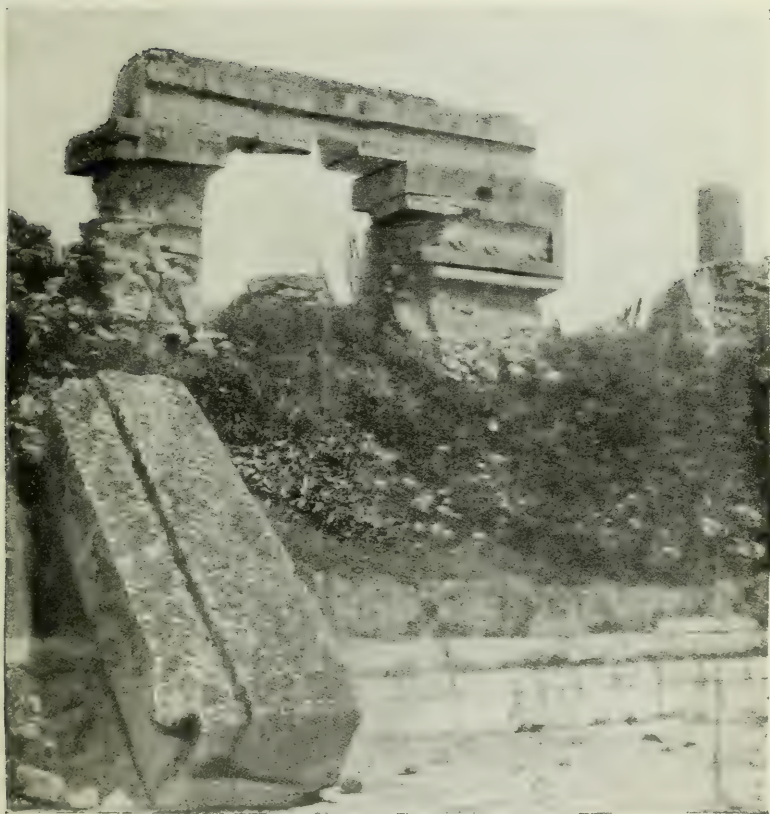
over, they are of a size generally such as must have taken several men to handle, and must have been fitted by constant placing and replacing. The fine surfaces of the stones in the walls of such buildings as Huanuco Viejo, and others which I examined, might have been made with the most modern of tools.

Extreme massiveness marks the stone con-

struction of early Mexican and Peruvian buildings, especially in the Andine region, and the walls occupied a space out of all proportion to the rooms. "At Uxmal in Yucatan it is about forty to one." Of course their builders, or at least in Peru, took into account the frequent and severe earthquake shocks, and to their credit it is that earthquakes innumerable throughout the centuries have not destroyed their erections. The same cannot be said for modern buildings in Spanish-America, although the edifices of the colonial Spanish period are extremely strong and durable. The modern builder in America takes no account of earthquakes; the ancient was far wiser. Shocks are of constant occurrence in the regions facing upon the Pacific, and during a stay of several months in one part of the South American Cordillera, slightly to the south of the Titicaca region, I recorded shocks on an average of two a week, some of them sufficient to have cracked ordinary buildings. In the region occupied by the Inca Empire buildings are rarely of more than one story, and no doubt this was connected with danger from earthquakes.

The best remaining example of the stone-building art of the early American race is generally considered to be the Maya architectural structures; and the palace at Uxmal and the castillo at Chichen Itza, which have been described, indicate a mastery in architectural design on the part of their builders. Nevertheless, they have faults. There is a lack of unity in the plan and grouping, and an enormous dis-





RUINS OF MITLA, SOUTHERN MEXICO.

To face p. 210.



proportion between the available space and the material of the walls which enclose it. In Peru perhaps one of the most praiseworthy examples of the stonemason's art is the Temple of the Sun at Cuzco, with the circular form of its walls, which curve inward and upward and are most imposing. This part of the temple still remains.

It is to be recollected that the architectural Mexicans, Central Americans, and especially the Peruvians, had no derricks or other apparatus for hoisting. Probably they rolled the great stones into place along prepared ways and up inclined planes of earth, which were afterwards removed. In building the famous fortress of Sacsaihuaman at Cuzco, considerable heights had to be ascended, and at Tiahuanaco stones weighing, it is stated, four hundred tons were carried seventeen miles. In the fortress of Ollantaytambo large stones were hauled up a great ascent and were fitted perfectly. The moving of such great objects by such simple processes shows what could be done by great numbers of men enlisted in a single effort, and how high an organisation it must have been which could hold them together and feed them. In this connection it is to be recollected that on the Peruvian uplands, where these great ruins exist, timber does not grow—there is not a tree of any dimensions within vast distances—nor will maize ripen there. On my journeys in those regions the feeding problem often was acute.<sup>1</sup> What must it have been for

<sup>1</sup> See my book "The Andes and the Amazon" (fourth edition).

the huge armies of workmen who, over long periods, must have been engaged in building these great structures?

In engineering science the early American had considerable hydraulic knowledge, as borne out by the reservoirs and aqueducts of Arizona, Mexico, and Peru, which show that hydrotechny was understood. Frequent reference has been made in these pages to these hydraulic works. Terrace-building and culture were practised on the Pacific slope in many points, from Arizona to Mexico and Peru, as already described. The capabilities of the early American builders have been fully recognised. "As cultivators and engineers the early Peruvians excelled their European conquerors," a recent authority <sup>1</sup> says.

The age of these early American buildings has already been discussed, but the views of a well-known Americanist <sup>2</sup> should have a place here. "When we turn to the monumental data, to the architectural and structural relics of the ancient Americans, we naturally think first of the imposing stone-built fortresses of Peru, the massive pyramids and temples of Yucatan and Mexico, and the vast brick piles of the Pueblo. It is doubtful if any of these notable monuments supply pre-historic dates of excessive antiquity. The *pueblos*, both those now occupied and the vastly greater number whose ruins lie scattered over the valleys and *mesas* of new Mexico, were constructed by the ancestors of the tribes who

<sup>1</sup> Encyc. Brit., "Peru."

<sup>2</sup> Brinton, "Essays of an Americanist," Philadelphia, 1890.

still inhabit that region, and this at no distant day within the period and the commencement of our era. There is every reason to suppose that the same is true of all the stone and brick edifices of Mexico and Central America. The majority of them were occupied at the period of the Conquest, others were in process of building, and of others the record of the date of their construction was clearly in memory and not distant."

In common with some other writers, this author questions the very remote antiquity of these buildings, these once famous cities, which have fallen to ruin and are sunk into oblivion in the midst of dense tropical forests, such as that of Palenque and others in Yucatan, and takes issue with the earliest explorers, including the Friar Lorenzo de Bienvenida, who wrote about them from Yucatan to Carlos V. in 1548—and who even then had found lofty stone pyramids, mounds, and temples covered with a forest growth as old as the forest around them. Of course, as already discussed, the opinion of most competent observers is that these structures date from some five centuries before the Spanish advent, but that they were preceded by earlier cultures.

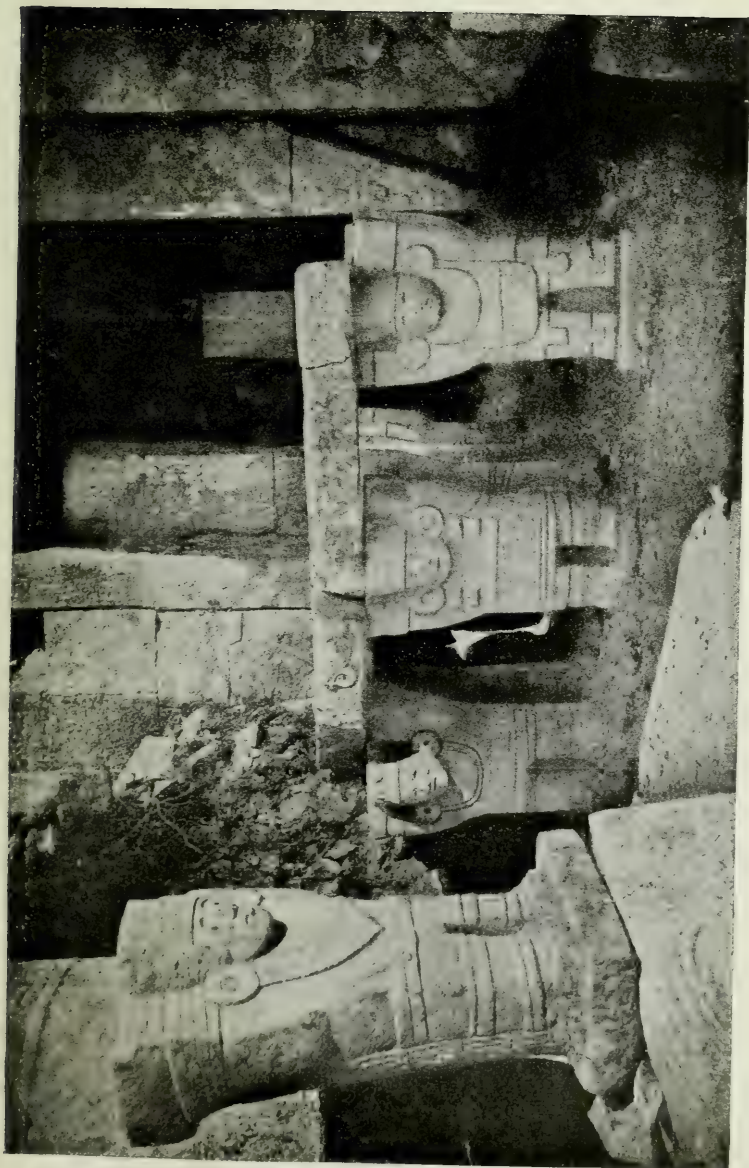
As to the ancient Peruvian structures, especially that of Tiahuanako, the same writer considers that even the oldest of these are "not older than the mediæval period of European history"; whilst another writer, of Spanish origin, says, on the contrary, that "even the

memory of their builders was lost thousands of years before the discovery of America " <sup>1</sup> —opinions which, therefore, differ widely. As regards these latter structures, more study has been given to them since those writers discussed them, and as has been shown, the ruins of the Andine peoples are resolvable into more than one epoch, the age of some being measured only by centuries, the others possibly by thousands of years, whilst the Mexican structures are also of varying epochs. Further, it is perhaps not unnatural for an American writer to seek to establish an autochthonous origin for the early civilisations of America. Even to the scientific mind some sense of patriotic pride might, almost unconsciously, tinge opinion. He adds: " Indeed, summing up the reply to an inquiry which has often been addressed as to the industrial evolution of the indigenes of our continent, I should say that they did not borrow a single art or invention, nor a single cultivated plant from any part of the Old World previous to the arrival of Columbus. What they had was their own, developed from their own soil, the outgrowth of their own lives and needs." There is, however, the same spirit displayed here as that commented upon before, in which it seems that some American students do not wish to acknowledge the " open door " to an outside influence, which more far-seeing writers have maintained.<sup>2</sup>

An important part of the problem concerning

<sup>1</sup> "General Bartolomé Mitre," 1879, Buenos Ayres.

<sup>2</sup> See p. 37.



RUINS OF CHICHEN ITZA, YUCATAN. ALTAR SUPPORTS.





the early American cultures is of course that of establishing the relationship between North and South America—that is, between the art of the Mexicans and the Peruvians—and much work upon this point remains to be done.

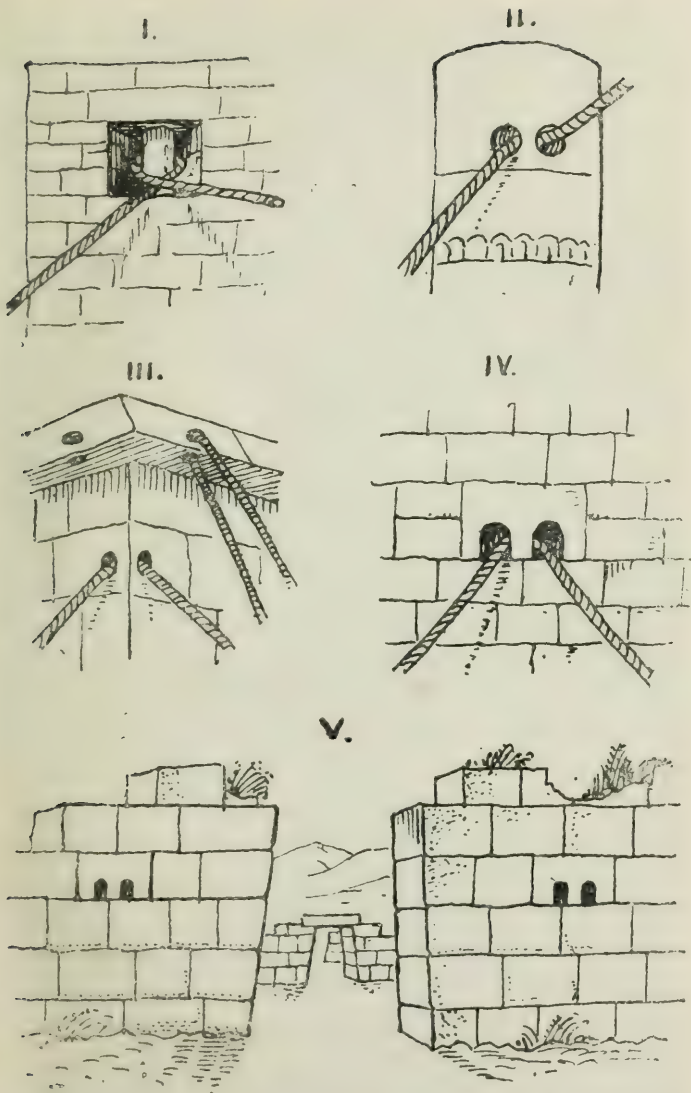
There is no record of any communication between Mexico and Peru in pre-historic times. There was probably none by sea, whatever the land communication may have been. Neither Aztecs nor Incas were navigators; they had no use for the sea except for fishing. It is true that the early Peruvians built large *balsas*, or rafts with sails, and it was a craft of this nature that Pizarro and his men encountered off the coast on their voyage, and from whose crew they first learned of the Inca Empire. Also the fishermen of the Chilean coast were extremely dexterous with their catamarans of inflated seal-skins, upon which they darted over the rollers. Even to-day the Chilean boatmen are the most expert on the coast, but it is to be recollected that the early Chileans did not belong to the Inca Empire; on the contrary, the Arucanians, the hardy fighters of Chile, opposed the Inca advance to the south. But nothing in the form of a sea-going vessel had been evolved all along this ten thousand miles of coast, beyond these primitive canoes, from the Eskimos to Patagonia, as far as is known.

What communication there was must have been by land, and of course the famous Inca roads covered more than a thousand miles, and might conceivably have occasioned some contact be-

tween the Inca and Maya-Aztec influences, as mentioned elsewhere.

Whilst there are wide differences in early Peruvian and Mexican structures, there is analogy on some points, and as regards matters of decorative art and social customs in some cases there is exact similarity between them. Some points worthy of note have been touched upon, such as the long galleries—on plan—of the Mayas and the Incas, whilst the community-houses of the Cliff Dwellers and Pueblos seem reminiscent of those of Huanuco Viejo and others in Peru. As to the round towers and square towers of the Pueblo region of Arizona, &c., they appear to be similar to those of the Peruvian highlands. But in Peru we never or rarely find the riotous and beautiful sculpture of the Mayas of Central America, except that the pre-Inca monoliths are carved; nor in Central America and Mexico do we observe the same character of polygonal-shaped wall stones, such as are so marked a feature of Inca walls. Furthermore, we do not encounter the pyramid-temple in Peru. The use of round stone columns occurs in both architectural regions; such as the monolithic columns of Mitla and the serpent columns of Central America, whilst in Peru the sole example apparently is that of Incahuassi, on the coast. These last, however, are not monoliths.

A minor detail occurring in stonework in both continents, to which I am not aware that attention has been drawn before, is that of cord-holes in masonry, here illustrated. Fig. 1 shows a



EXAMPLES OF CORD-HOLDERS IN EARLY AMERICAN MASONRY.

kind of "dumb sheave" from Palenque in Chiapas, usually found on the inside of doorways a foot or two back from the jamb, and distributed in rows from lintel level to floor.<sup>1</sup> Fig. 2 is from the back of a serpent-column at Chichen Itza in Yucatan,<sup>2</sup> and in Fig. 3 the same kind of cord-holder occurs in corners and mouldings.<sup>3</sup> Fig. 4 is a similar device from Copan in Honduras,<sup>4</sup> whilst Fig. 5 is from Huanuco Viejo in Peru.<sup>5</sup>

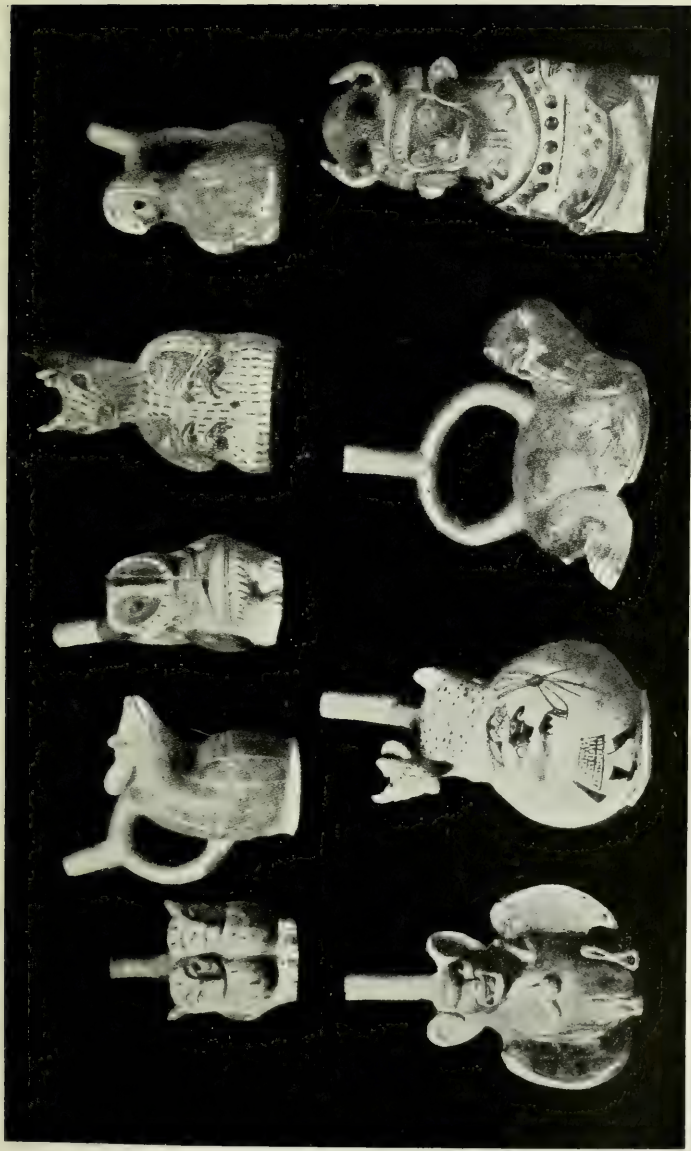
Whilst these holes were undoubtedly in all cases for the same purpose, that of cord-holders for curtains—and the similarity between those of Central America and Peru, more than 2,500 miles apart, is striking—there is a legend to the effect that the holes at Huanuco Viejo served the purpose of gallows. The natives of the region informed me that in the time of the Incas a cord was passed through the hole and round the neck of the person to be executed, one side being for men, the other for women offenders, and that a loose stone block upon which they were caused to stand being removed, they remained suspended and were strangled.

As regards ceramic art, similarity in some points of design between Mexico and Peru, and even Arizona, exists: the same wedge patterns, wave patterns, "Greek" patterns, &c., constantly occurring between these various regions of

<sup>1</sup> "Ancient Cities of Mexico," Holmes. <sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.* <sup>4</sup> "Biologia Centralia Americana," Maudslay.

<sup>5</sup> My own sketches in Peru; see "The Andes and the Amazon."



PRE-INCA POTTERY FROM TOMB, CHICAMA VALLEY, COAST OF PERU.



Mexico and Peru.<sup>1</sup> But there was no potter's wheel in the Western world, although it was almost invented. Patience, time and muscle, knack and touch, a trained eye and expert brain, and patterns fashioned from memory, or anew, or possibly inheritances of former art, aided by a box of dry sand, were able to give the charming results which they attained. The pottery of the Incas and pre-Incas especially shows the power of care and devoted craftsmanship. Nothing can exceed the beauty and originality, in their special fields, of the examples of earthen vessels dug up from the Peruvian *huacas*, illustrations of some of which are given in this book. Soap-stone, when used as it was for pottery, was partly cut into the desired shape in the native ledge, broken or prised loose and afterwards scraped into form; and paint was excavated from mines and deposits, and rubbed fine on stones with water and grease.

Both among the early Mexicans and Peruvians wall-painting was an art. Some of the walls I examined in Peru were coloured with vermilion, doubtless from the cinnabar or quick-silver deposits which occur in that country. The women of the Incas, it is recorded, used vermilion to paint their faces on certain occasions.

As regards art in weaving in early America, Indian textile work was done entirely by hand; the only devices known were the bark peeler and beater, the shredder, the flint knife, the spindle, the rope twister, the bodkin, the warp

<sup>1</sup> See p. 245.

beam, and the most primitive harness. Beautiful and soft dye-colours were attained. The textile arts were employed in clothing, furniture, utensils, and a hundred ways—domestic, social, and religious. On the Pacific coast of America basketry in every form of technique was known. In Northern Mexico network, rude lacework in twine, was improved upon by the people farther south, where finer materials were available. By “figured weaving of most intricate type and pattern, warps were crossed and wrapped, wefts were omitted and texture changed, so as to produce marvellous effects upon the surface. This composite art reached its climax in Peru, the llama wool affording the finest staple on the whole hemisphere.”<sup>1</sup> The making of the “Panama” hat was and is a famous industry, carried out in exceptional conditions. The woven *poncho* was a universal native garment which the Spaniards adopted, and it is similar in form both in Mexico and Peru.

Indeed, it would be difficult to exceed the beauty and utility of the textile fabrics and weaving of the early Peruvians, which to some extent prevail still, and we are again caused to reflect upon the great care, ingenuity, and patience which the Indian displays in his handicrafts, which in some instances are in marked contrast with the machine-made goods of modern commerce. There is a note of sadness in the passing of the home crafts and industries of a primitive people, or, indeed, of any people. The

<sup>1</sup> Encyc. Brit., “America.”



Quechuas and Aymaras of the Andine uplands still grow their wool and weave their own garments, but they are beginning to prefer the gaudy colours of the aniline dyes of German manufacture rather than the soft shades their forefathers made at home, and doubtless the time is at hand when the excellent and durable "tweeds" and homespun which they make for *poncho* or skirt will be replaced by cheap material imported from abroad by the efforts of industrious bagmen and "drummers," a thin stream of whom is already percolating into the Peruvian and Bolivian interior, and who in due time will perform for the Cholo of the Andes the same "service" that Lancashire has performed for India, of vulgarising or ruining the old handicraft of the natives. The same thing may be said for Mexico and Spanish America generally. One striking instance is the substitution of the picturesque *olla* or earthen vessel for water-carrying by the women of Mexico by the empty petroleum-can of the foreign oil trusts!

As before remarked, the mechanical powers of the early Americans were handicapped by their lack of knowledge of the use of iron, and, indeed, it has been asked, if their culture came from Asia, how was it they had no knowledge of this? Primitive metallurgy was practised in Mexico, Columbia, and Peru, but no evidence of smelting ores with fluxes is offered, although casting from metal melted in open fires is assumed. Gold, silver, copper, pure or mixed with tin or silver, are to be found in both continents. Metals

were cold-hammered into plates, or sometimes treated as malleable stones, and soldering, brazing, and the blow-pipe in the Cordillera provinces are suspected, but their use requires further evidence. Ores, however, were smelted by the aid of natural draught, as mentioned later. At Chiriqui, in Panama, there were remarkable products of ancient metallurgy, which tax the imagination as to the process involved, especially as these ancient metal-workers disguised their methods at times. The fact remains, however, "that the curious metal-craft of the narrow strip along the Pacific from Mexico to Titicaca is the greatest of archæological enigmas." Metal-working appliances must have been of the rudest kind, and if moulds for casting were used, they must have been destroyed, for no museum contains samples of them, and the processes are not discoverable. To the work of these cunning pre-historic artificers a great deal of study has been devoted, surprising productions of whose handiwork have been recovered in the art provinces of Mexico and the Cordilleras, especially Chiriqui. It is the case, however, that both the tools and the methods have escaped the investigations of the archæologist, as they did the ablest goldsmiths in Spain, "for," as Herrera said, "they never could conceive how they had been made, there being no sign of a hammer or any engraver or any other instrument used by them, the Indians having none such."

Indeed, the traveller to-day, especially in Peru, will regard with much interest and speculation



54  
 TLAMITCALPANTS DONTU  
 EL LUGERO DEL ALTAJEREA  
 CON EL NOMBRE DE TONTU  
 DONDE SE LA CABA DE SAN  
 TITLA DONDE SE LA CABA  
 SON LAS CASAS LA CABA  
 PUS ANTE VELENDOR DE  
 TAYNA DE SUSCAYNA

EL TIGRE ES UN ANIMAL  
 QUE SE ENCONTRA EN  
 LOS MONTAÑOS DE  
 LA SIERRA DE SUSCAYNA

SCULPTURED TIGER AND HEAD. EXAMPLES OF NAHUA OR AZTEC ART.



the objects of copper and gold which have been and often still are recovered from the *huacas* or burial-places. The small, heavy images of copper which one may examine in Peru could scarcely have been made except by casting in a mould. Beautiful and intricate vessels and ornaments of gold were a feature of Inca art. In Western Mexico I observed the native art of beating out large copper vessels as much as three or more feet in diameter, and dealings in copper *matte*, a crude smelted ore, are practised as "home industries" on the Pacific slope at Mexico, and this, whilst it may have borrowed something from modern methods, must have had some foundation in pre-Columbian art.

In connection with early metallurgy on the Pacific coast, and what has been said concerning smelting, it is to be recollected that at Potosi—now part of Bolivia—the Indians not only smelted the argentiferous galena, or silver-lead ores, which abound there, and made Potosi a by-word for mining wealth, but actually showed the Spaniards, in early days, how they used the natural force of the wind for smelting. "They built little adobe furnaces, called *guayras*, and deposited therein the ore, sufficiently wetted and incorporated with others that facilitated their smelting and filled them up with fuel, when the whole began to burn by means of the natural blowing of the wind, which gave a better result than the artificial draught of a bellows such as the Spaniards used. This method of smelting

was continued at night, and upon the heights of Potosi the lights of more than fifteen thousand little furnaces were seen." The word *guayra* is Quechua for wind.

The above account is from an early Spanish chronicler: Pinelo. Indeed, the skill of the artificers of ancient Peru in the precious metals is well known. "The metal was smelted in small furnaces, the fires of which were blown by means of small pipes, at one end of which the air emerged through a small hole; it was then emptied into moulds and spread out in thin streaks imitating the filaments of maize or small flowers, the soldering being performed without leaving the slightest traces of the junctures. With gold, silver, and copper plates they adorned the effigies of men and pottery of all kinds, which have caused the admiration of all who have seen them. Cloths of vicuña wool, which were interwoven with gold and silver filaments, have come down to us to-day in all their primitive freshness. Among other wonders of Inca industry, admiration is evoked by the mysterious manner in which, by merit of skill and constancy, they burnished emeralds, amethysts, and other stones of equal hardness."<sup>1</sup> This weaving with gold threads is suggestive of early Syrian or Arabic work—an art which passed in remote times from Babylon to other cities, and which is first mentioned as employed in the ephod of Aaron.<sup>2</sup>

<sup>1</sup> "El Peru en 1906," Lima.

<sup>2</sup> Exod. xxxix. See Encyc. Brit., "Gold and Silver Thread."

The Spanish accounts of the goldsmith's art of the Incas is very full, and the objects of art in gold which the traveller may observe which exist to-day in Peru will remove any suspicion that those accounts are fables, although they may have been overdrawn at times. It is to be recollected that the Incas set little store by the value of gold, which they did not use as currency, but simply for purposes of decoration, and the profuse images of gold—men, animals, trees, fruits—at the temple of Cuzco, before the Conquest, and, indeed, during it, are one of the wonders in the history of the yellow metal.

The products and remains of indigenous industries must be divided carefully into several classes, as pre-Hispanic, Hispanic or Columbian, those of the present time, and those which are spurious. Now that travel and interest are slowly gathering way in these remote regions, it is common to find the beginnings of a trade in spurious antiquities. An old Indian woman used to pester me frequently to purchase copper idols and images "dug up from tombs," which, it was easy to see, were of recent manufacture. However, they were at least moulded from some genuine antique, and, indeed, the genuine articles and *huacos* from the tombs are so plentiful in Peru—especially the beautiful pottery—that imitation is scarcely likely to be a thriving business yet.

As regards the historical records of the early Americans, no help is forthcoming from any decipherment of these concerning any supposed

Asiatic connection or contact, or at any rate so far. The Mayan hieroglyphics and papyri have been fairly well studied, but much remains to be done. The Incas did not preserve records in this way, but it is considered that the preceding people did. "There can be no doubt that the pre-Inca people made use of hieroglyphics, but the system fell into disuse during the most enlightened epoch of the Incas, and as the art of deciphering them is, up to the present time, unknown, we are still ignorant of what they might reveal. According to a Spanish chronicler<sup>1</sup> it was forbidden by the Incas to preserve writings, for they were looked upon as the cause of evils and disease."

The records of the Incas were the remarkable *quipos*, as before described, which replaced the earlier hieroglyphs. These were bunches of cords of wool, knotted and coloured, every knot and colour of which told some tale, and this practically constituted the Inca writing. Historical records and accounts were kept by this method, and the special custodians of the *quipos*, the librarians or historians, were expert in their use, and could give a minute and detailed account of what had happened thereby. It is interesting to note that an analogous system was used by the Chinese, Thibetans, and certain people of Oceania, and it is worthy of observation "that the island of Tahiti retains the Quechua or Inca name that is still in use, since the inhabitants are called 'Tipona,' a word

<sup>1</sup> Montesinos.



corresponding to 'Quipo,' but as the letter 'k' does not exist in their language it is rendered as 't.'"<sup>1</sup> In Tibet this mnemonic system of writing by means of knotted cords was current even when writing was introduced in the seventh century. Of course this may be a universal invention. Even in England we tie a knot in our handkerchiefs in order to remember something.

There is much to be done in exploration and discovery among the Mexican and Peruvian culture areas. Especially interesting is the region of the Peruvian coast, the strip of semi-arid land fifty to eighty miles wide and fifteen hundred miles long, between the Andes and the Pacific. As has been shown, there are remains of very great antiquity here. From the district surrounding Trujillo in the north, down past Lima to Pisco, Nazca, and other places towards the south a careful exploration should reveal much. The Inca and the pre-Inca remains are readily determined. The huacas or tombs and sacred places are by no means all explored.

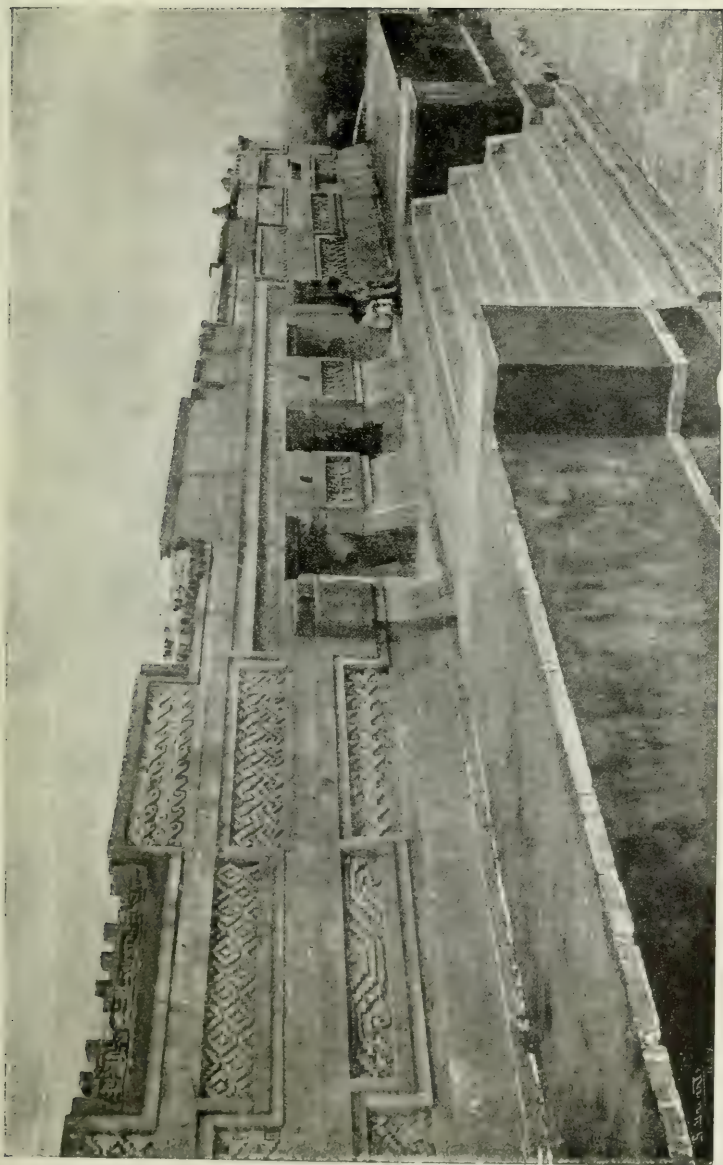
The great advantage which photography now gives the archæologist, in contrast with the necessarily faulty method of sketching of only a generation ago, is very apparent in studying books upon these subjects, of last century. Illustrations in these are sometimes seen to bear only the remotest resemblance to the actual object, giving often an erroneous impression. This has not always been the fault of sketching, but of bad

<sup>1</sup> "El Peru en 1906," Lima.

sketching, or of drawing on the imagination. So monumental a work, for example, as that of "Bancroft's Native Races of the Pacific of America" <sup>1</sup> is extremely poor in illustration, and these are often crude and inaccurate. Doubtless it was impossible to obtain accurate views. As an example the picture given in that work of the Inca ruins of Peru is misleading. Without exact representation it is impossible to compare form and pattern belonging to one culture with those of another, and words alone cannot convey any sense of comparison. To *see* a thing, either actually or on paper, is the first demand of the student.

We require a careful study of the patterns and designs upon the early Mexican and Peruvian buildings, pottery, and textile fabrics, and a comparison with each other, so as to prove or strengthen the influence of early Mexico on early Peru, or vice versa; and a careful comparison of all these decorative patterns and symbols with those of the Old World, whether on Persian carpets, Egyptian costumes, or ancient pottery. Such comparisons have, of course, been made, but probably not by the best scientific faculty, and not in a sufficient range or abundantly enough. The illustrations given in this book are but a few specimens of the mass of available material. The florid ornament of Chan Chan on the Peruvian coast it may be of interest to compare with Oriental carpets and costumes, seeking a similarity in pattern, for example.

<sup>1</sup> London, 1875.



RUINS OF MITLA, MEXICO.

Facade of the Hall of the Columns.



There is something almost pathetic involved in a contemplation of the praiseworthy arts and civilisations of prehistoric America. They were cut off at a blow in the mere act of discovery, ravished wantonly and unnecessarily by sixteenth-century Europe, and they seem to have formed no link in the march of human progress which intelligent man bids himself to think is the destiny of the world. They were utterly swept aside, and became mere shells of ruins, scattered monoliths, and other fragments here and there, as if they were a reminder of the fleeting endeavours of man. The perished civilisations of Asia and Africa were at least links in a chain which reached in ever-growing importance to the world of to-day, but prehistoric America set no seal on time, influenced no act of posterity, added nothing to the plan of mankind, as far as can be seen. Yet we may reflect that the monuments of these ancient isolated American people have survived by virtue of their good qualities of solidity and conscientiousness in construction. At least we know that they were in the main the perpetuation in stone of a religious purpose, and we must concede to their industrious builders the lofty sentiment of a desire to create and bequeath something which should endure long after they themselves had passed away.

## CHAPTER XIII

### CONFLICTING TESTIMONIES

Further evidence—Linguistic affinities—Analogies of signs and symbols, handicrafts and myths—Imported or indigenous?—Mongolian affinities—The Eskimos—Great variety of habitat—Mixed Spanish blood—Resemblance of Mexicans and Peruvians to Japanese—The Chinaman at home in Peru—Language offers no proof—Chinese and Otomi—Possible prehistoric immigrations from Asia—Kubla Khan—Affirmative facts—Humboldt and the Mexican and Asiatic calendars—Babylonian-Greek imitation—Similarities in ornament—The “Greek” ornament universal—The “lost ten tribes”—The Swastika; widespread occurrence—Oriental symbols—The cross in prehistoric America—The four ages of the world in Asia and Peru—Mesopotamia and Peruvian river craft—Rameses III. and Lake Titicaca.

IN physical and linguistic affinities, in analogies of signs, symbols, devices, the similarities of handicrafts, the comparisons of mythologies and cosmogonies, there is a vast amount of material which may be drawn upon, and which, indeed, has been drawn upon, by numerous writers who have sought to affirm the existence of the influence of the Old World upon the New, and to establish a connection in early times between them. Indeed, it is impressed upon us that the

question is one which will not acknowledge, at present, any finality.

As regards the earliest suggested influence, perhaps the main contentions have centred around a Mongolian origin, and much controversy has been waged on this point. One of the principal American writers<sup>1</sup> in this field, before quoted, stoutly maintains the impossibility of any such affinity, and discussing the comparison of types of skulls, skin, colour, &c., points to the fact that "the Mongols are the roundest-headed of people, and the Americans in nearest contact therewith—that is, the Eskimos are a long-headed people—and expresses surprise that Virchow should have repeated that the Eskimos are of Mongolian descent. "If colour, hair, and crania are thus shown to present such feeble similarities, what is it that has given rise to a notion of the Mongoloid origin of the American Indians? Is it the so-called Mongolian eye, the oblique eye, with a seeming droop at its inner canthus? Yes, a good deal has been made of this by certain writers."

The writers named below<sup>2</sup> instanced certain tribes of American Indians, such as the Eskimo, the tribes of the North Pacific Coast, and a tribe of the Brazils, which they assert show marked Chinese traits, and have argued for a Mongoloid character. Indeed, the relation of Eskimo and Mongol has been discussed very

<sup>1</sup> Brinton, *ante*.

<sup>2</sup> Avé-Lallemant, St. Hilaire, Peschal, and Virchow, also Cuvier.

freely. A recent authority before quoted considers that while the American aborigines north of Mexico may, as to their general constitution, be considered as one "American race" whose nearest congener is to be found in the "Mongolian race" of eastern Asia, &c., there is a wide range in variation among them with respect to special physical characteristics. Some authorities<sup>1</sup> separate the Eskimo from the Indians, and regard them as a distinct sub-race of the Mongolo Malay. This, however, in the view of this authority is hardly necessary, if the view of other students is adopted, that the inhabitants of North-eastern Asia and America are a unit divided into a great many distinct types, but belonging to one and the same of the four large divisions of mankind, in which sub-divisions of humanity, based on the hair, the Americans are straight-haired or Mongoloid.<sup>2</sup>

It is further argued that environment is responsible for the changes or variations in the Americans. "Occupying 135° of latitude, living on the shores of frozen or tropical waters, at altitudes varying from sea level to several thousands of feet; in forests, grassy prairies, or deserts; here starved, there in plenty; with a night here of six months' duration, there twelve hours long, here among health-giving winds and there cursed with malaria—this brown man became, in different culture provinces, brunette or

<sup>1</sup> Like Dr. Hrdlicka, "Handbook of American Indians North of Mexico," before quoted.

<sup>2</sup> Encyc. Brit., "North American Indians."



black, tall or short, long-headed or short-headed, and developed on his own hemisphere variations from one average type." <sup>1</sup> This question of the Mongolo-Malay Eskimos does not, of course, preclude the hypothesis of various migrant waves of humanity from Asia at various times. But the concensus of opinion that the Eskimos are of Mongol origin is exceedingly strong.

Most writers agree that the natives of North and South America are substantially the same in race characteristics. Indeed, the traveller who has had occasion to observe the Mexican and Peruvian natives will be impressed with their similarity. This similarity is preserved by the Mestizo—that is, the Spanish-American, with both Spanish and native blood in his veins. In this connection it is, of course, to be recollected that the Spaniard himself embodies a great mixture of races, and in Mexico he brought in Iberian, Roman, Celtic, Semite, Vandal, Goth, and Moorish blood and mingled it with the native stock.

Apart from the more scientific arguments as to the Mongolian connection, both those last cited and those given in previous chapters, there are to be considered what might be called "popular" beliefs and reasonings which are extremely hard to argue away or destroy. Thus it is that a Mongolian resemblance or affinity in many instances is apparent to the observant traveller, both as to Mexico and Peru, to say nothing of the indigenes of British Columbia.

<sup>1</sup> Encyc. Brit. article "North American Indians."

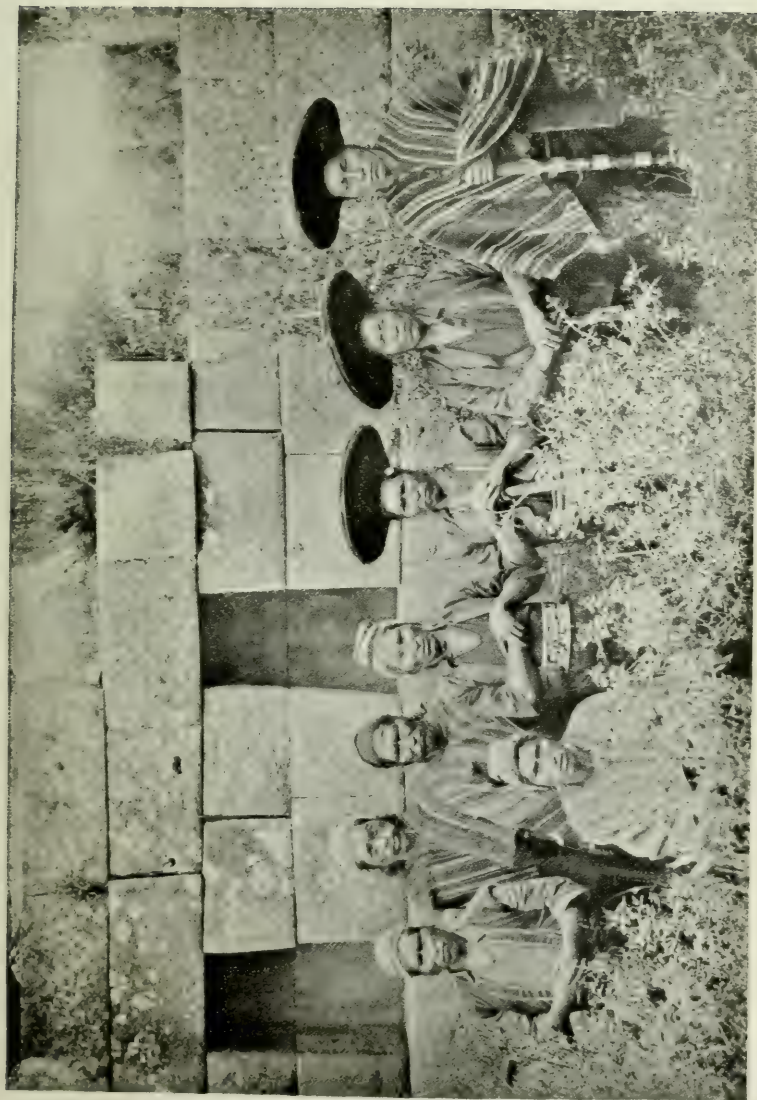
The Japanese facial form and expression is found constantly among the Mexicans, and retains itself at times even after admixture with Spanish blood, such as constitutes the bulk of the Mexicans of to-day; some of the Mexicans, however, are dark as Hindus, whom they resemble at times. In the remote parts of Peru and Bolivia the Asiatic type of face constantly arrests the traveller's attention, and to this the native custom of the wearing of the pigtail or queue of course lends added significance. Among the Indians of the uplands of Peru, Bolivia, and Ecuador the queue is very general. In the general appearance, however, the countenance of the native is often strikingly like the Chinese and Japanese, as well as the Tibetans, and this is a matter which cannot easily be set aside. Some resemblances may be traced in the illustrations given here.<sup>1</sup>

Personally, I have been greatly impressed with this Oriental type among the natives of Mexico and Peru; and I have found that educated Peruvians and Mexicans regard it as a distinct probability that the aborigines show early Chinese influence. "All I can say is," said the newly-appointed Mexican minister<sup>2</sup> to the Court of St. James's, as we conversed upon the subject, "that the indigenes of Yucatan, in some cases, *are* Chinese. That is to say, they resemble them facially, and they speak like them: and, indeed, some close resemblance between native and Chinese words has been found recently."

A further point worthy of note is the marked

<sup>1</sup> See pp. 160, 234.

<sup>2</sup> February, 1912.



PART OF THE INCA FORTRESS OF OLLANTAYTAMBO, AND QUECHUA NATIVES.

Observe the "Mongolian" faces.



sympathy or affinity which seems to exist between Chinese or Japanese immigrants into Peru and the natives, and such immigrants are fairly plentiful. The Chinaman seems to drop into his place at once, as if he were returning to some ancient home. In the small remote villages he seems part of the people, and he shortly has at his service and disposal Indian and Chola women who soon acknowledge him as their lord, without any sense of repugnance. The Chinaman, however, is generally regarded as *raquitico* in Peru, and his progeny with the native woman do not appear readily to survive, although further observation would be necessary to establish this as a scientific fact.

It has been a subject for constant remark that the native Mexicans are quite dissimilar to the people of the lands to the eastward—Europe and Africa—but that they are “not unlike the Mongoloid races to the west, the people of North and East Asia, and to some extent of the Polynesians. The general tendency among anthropologists has been to admit a common origin, however remote, between the tribes of Tartary and America.”<sup>1</sup> It may be that the near future will help us in this matter; the awakening of China, possibly to be followed up by a greater knowledge of and research in that and other parts of Asia, may bring to light something regarding early contact with America. There is a new ferment in Asia, stronger perhaps than ever to-day.

To consider now briefly the question of lan-

<sup>1</sup> Encyc. Brit., “Mexico.”

guage, the supposed affinity in linguistic matters between the Mongolian people and the early Americans has also been a well-discussed theme. It has been exhaustively analysed by a writer before quoted,<sup>1</sup> who arrives at a result in conformity with his other conclusions, that there is no foundation for such supposed affinity. "There is one prominent example, which has often been put forward, of a supposed monosyllabic American language; and its relation to the Chinese has frequently been asserted—a relationship, it has been said, extending both to its vocabulary and its grammar. This is the Otomi, spoken in and near the Valley of Mexico." The Otomies, it will be recollected, were a warlike people who inhabited part of the Valley of Mexico in territory adjacent to the Aztecs, and who gave such fierce battle to Cortes and his defeated soldiers after the famous *Noche Triste* and retreat from the siege of Tenochtitlan or Mexico city, along the fateful causeway.<sup>2</sup>

"Some have thought that the Maya of Yucatan has in its vocabulary a certain number of Chinese elements, but all these can readily be explained on the doctrine of coincidences. Indeed, coincidences of equal worth have been marshalled, and show that the Nahuatl is an Aryan dialect descended from the Sanscrit. In fine, any, even the remotest, linguistic connection between American and Mongolian languages has yet to be shown, and any linguist who considers the radically diverse genius of the two

<sup>1</sup> Brinton, *ante*.

<sup>2</sup> See Prescott; also my "Mexico."

groups of tongues will not expect to find such relationship," says Dr. Brinton.

A more recent authority <sup>1</sup> says : " This original connection, if it may be accepted, would seem to belong to a long-past period, to judge from the failure of all attempts to discover an affinity between the languages of America and Asia. At whatever date the Americans began to people America, they must have had time to import or develop the numerous families of languages actually found there, in none of which has community of origin been satisfactorily proved with any other language-group at home or abroad. In Mexico itself the languages of the Nahua nations, of which the Aztec is the best-known dialect, show no connection of origin with the language of the Otomi tribes, nor either of these with the languages of the regions of the ruined cities of Central America, the Quiché of Guatemala and the Maya of Yucatan."

Bancroft,<sup>2</sup> in dealing with the coast languages of North America, points to the great diversity of such languages and dialects on the seaboard. " In California the confusion becomes interminable : as if Babel-builders from every quarter of the earth had here met to the eternal confounding of all ; yet there are linguistic families, even in California, principally in the northern part. South of Acapulco, on the Mexican coast, the Aztec tongue holds for some distance. It is not at all improbable that Malays,

<sup>1</sup> The article " Mexico " in the *Encyc. Brit.*, last edition.

<sup>2</sup> " Native Races," vol. iii.

Chinese, or Japanese, or all of them, did at some time appear in what is now North America, in such numbers as materially to influence language, but hitherto no Asiatic nor European tongue, excepting always the Eskimo, has been found in America. Theorisers enough there have been and will be ; half-fledged scientists, ignorant of what others have done, or rather failed to do, will not cease to bring forward wonderful analogies and striking conceptions." "The absurdity of these speculations," he adds, "is apparent to all but the speculator. The Abbé Brasseur de Bourbourg, who has given the subject more years of study and more pages of printed matter than any other writer, unless it be the half-crazed Lord Kingsborough, first attempts to prove that the Maya languages are derived from the Latin, Greek, English, German, Scandinavian, or other Aryan tongues ; then that all these languages are but offshoots from the Maya itself, which is the only true primeval language. So much for intemperate speculation, whether learned or shallow."

The only conclusion, it would appear, in this connection, that can be arrived at is that a period extremely remote must have elapsed since any affinity in language between Asia and America existed, and that during this long period this language has passed into its present varied and distinct forms.

As showing how opinion and knowledge change and develop, a very recent writer<sup>1</sup> upon

<sup>1</sup> "The Wanderings of People," Haddon, Cambridge University Press, London, 1911.



this subject leaves an open door to the prehistoric immigrant. He considers that "ethnologists are generally agreed as to the similarity of type prevailing among most of the peoples of the New World, which points to a common parentage," and remarks upon the resemblance to a Mongolian type, which has been discussed already here, and holds that it is to Asia rather than to Europe that we must look for the first ancestors of the American Indians. Notwithstanding the great number of languages existing in America, and especially in Mexico, as has been remarked, there is, it is considered, "a closer affinity between them than previously supposed, and it has even been said that 'language in America is the unmistakable voice of a race, echoed through a thousand vernacular dialects.'" Various migrations of peoples from the Old World, Europe as well as Asia, at various periods are here held to be the rational postulate, and that view seems to be the latest upon the subject. Immigrants from Asia appear to have "proceeded down the Pacific slope and to have populated Central and South America, with an overflow into the south of North America," according to this writer.

This entering of America from Asia from the north and down the Pacific coast zone appears to me a natural supposition. If we regard the geography of the twin continents, we see how unlikely it was that these prehistoric immigrants would forsake the line of least resistance and cross the barrier of the North and South

American Cordilleras. Even to-day these mountains, throughout their eight or ten thousand miles length, are only crossed by a few difficult railways, such as the Canadian Pacific and Central Pacific in North America, and the Oroya and Transandine Railway in Peru and Chile. Heavy gradients and curves and incessant snow-plough fighting are the means by which these communications between the Pacific seaboard and the American interior are kept up. But it is easy to see how, in the few places where these mountains break down—as in Southern California, giving entrance to Arizona, Colorado, and Mexico, and, in Central America, in Tehuantepec and Guatemala—these prehistoric people might have passed behind them. The Cliff Dwellers and the Aztecs may have been part of successive waves which left their human eddies. The other parts of South America appear to have been peopled by another stream of immigrants, with whom the mound-builders of the Mississippi, the Caribs, and the culture area of northern South America are connected.

Possibly it is worthy of remark—I have remarked it in my travels—that as regards the supposed Mongolian affinity a “Chinese” inflexion occurs, or seems to occur, in some place-names in the interior of Peru. Examples of such are Puntou, Puchao, and others, little Indian hamlets on the Marañon. Pronounced by the natives they are exactly like Chinese words. Puchao is a Quechua word, meaning “sun” and “eye.” Yonan is a Peruvian coast town. In



COLOSSAL HEAD CARVED IN DIORITE, MEXICO.



other ways also the nomenclature of things and places and the inflexion of the voice seem markedly Chinese, and are so commented upon by Peruvians of the interior.

The case, however, for linguistic affinity is not of a nature, as far as present knowledge goes, to yield much support to the theory of Mongolian origin, and we must turn now to the field of supposed similarities in symbols, devices, ornamentations, and other matters, such as have furnished food for discussion among archaeologists.

Of course, between the very remote periods of early culture and the European contact by the advent of Columbus, Cortes, Pizarro, and others, there is no reason why immigrants should not have arrived on the west coast of America, no records of whom have remained. There was no obstacle to communication between Asia, or, indeed, the South Sea Islands, with what are now the coasts of California, Mexico, and Peru, and, as has been mentioned, junks have constantly drifted over. There is, indeed, a legend that a Chinese junk in the time of Kublai Khan reached the coast of Peru.<sup>1</sup> Kublai Khan, the founder of the Mongols, who lived from 1216 to 1294, delighted in accounts of foreign countries, and sent out great armaments by sea and many expeditions, some of which reached the States of Southern India, Eastern Africa, and even Madagascar. These expeditions were brought about by an inordinate love for the

<sup>1</sup> Diccionario Hispano-Americano, Lima.

nominal extension of his empire by the exaction of tribute and the claiming of homage and submission. He built enormous palaces, patronised literature, and had a keen desire for knowledge. He caused to be constructed great astronomical instruments, and established an elaborate system of posts and mail-carriers throughout the country ; and it is a matter of history that he cared for the poor and took measures to relieve their distresses. In Peru the system of posts throughout the Inca Empire was a remarkable feature—post-houses and runners being maintained by the Government ; and the care that the Inca rulers took of the welfare of the poor forms one of the most characteristic parts of their regimen.

Kublai Khan's time was, of course, much subsequent to the establishing of the Inca dynasty in the eleventh or twelfth century, but it was at this period, or later, according to the Inca historians, that many of the great buildings of the Incas were erected. It is at least arguable that Mongolian influence crossed the Pacific to America at that time, as well as previously. Every succeeding Inca chief built his own temple anew, but it is conceivable that those of the later chiefs, from Pachacutec to Huayna-Capac, which are among the most solid remaining, were influenced in their character by Asiatic emissaries of Kublai Khan. I do not know if this view has been considered before, and there are difficulties in the way of its acceptance.

In discussing this matter of Asiatic origin for the American cultures, a recent authority

says: "There are details of American civilisation which are not easily accounted for on the supposition that they were borrowed from Asia. They do not seem ancient enough to warrant a remote Asiatic origin of the nations of America, but rather to be the results of comparatively modern intercourse between Asia and America. Humboldt compared the Mexican calendar with that in use in Eastern Asia. The Mongols, Tibetans, Chinese, and other neighbouring nations have a cycle or series of twelve animals, viz., rat, bull, tiger, hare, dragon, serpent, horse, goat, ape, cock, dog, pig, which may possibly be an imitation of the ordinary Babylonian-Greek Zodiac familiar to ourselves. The Mongolian people not only count their lunar months by these signs, but they reckon the successive days by them, as rat-day, bull-day, tiger-day, &c., and also by combining the twelve signs in rotation with the elements, they obtain a means of making each year in the sixty-year cycle, or the wood-rat year, the fire-tiger year, &c. This method is highly artificial, and the reappearance of its principle in the Mexican and Central American calendar is suggestive of importation from Asia.<sup>1</sup>

Humboldt considered that the intricacy and perfection of the Maya calendar system embodying so highly developed and accurate a chronology, which had amazed European scholars, could not have been evolved in America, nor

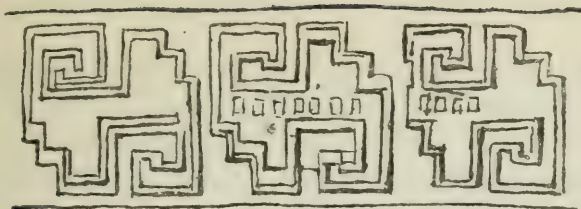
<sup>1</sup> Encyc. Brit. "Mexico." See also p. 113 of the present work.

be of native origin, and that it must have had a connection or origin in the Far East. A point of resemblance to which attention has since been called is "the Mexican belief in the nine stages of heaven and hell, an idea which nothing in Nature would directly suggest to a barbaric people, but which corresponds to the idea of successive heavens and hells among Brahmans and Buddhists, who apparently learned it (in common with our own ancestors) from the Babylonian-Greek astronomical theory of successive stages or concentric planetary spheres belonging to the planets," &c.<sup>1</sup>

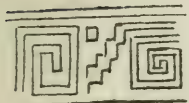
The fact that there are constantly recurring similarities of ornamentation and device on pottery, textile work, and carvings throughout early American and Asiatic countries is, of course, a matter of common knowledge, and it is difficult to explain these as coincidences, and to believe that they are not in any way of common origin or derived the one from the other. Among such matters are lines, waves, zigzags, fish forms, wedge forms, and other patterns, encountered in Mexico, Central America, Peru, the Cliff Dwellings, and even in British Columbia, corresponding with each other and with apparently similar forms on objects of art from Babylonia, Chaldea, Polynesia, Persia, Egypt, &c., and, indeed, a comparison of such objects or their illustration the world over will furnish endless examples. Among the most persistent of these is the "Greek fret," carved

<sup>1</sup> Encyc. Brit., "Mexico."

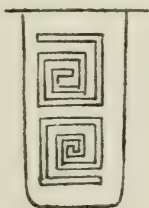




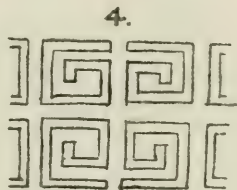
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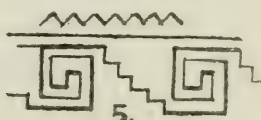
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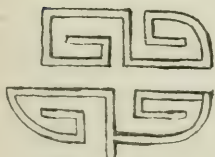
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Fig. 1 is a pattern on a textile fabric, a *poncho* dug up from a tomb in the ancient necropolis of Ancon on the coast of Peru, slightly north of Lima.

Fig. 2 is a pattern on pottery from the same place.

Fig. 3 is from a carved-stone vase from the Mosquito Coast in Nicaragua, now in the British Museum, where I sketched it.

Figs. 4 and 5 are from the ruins of Mitla, in Southern Mexico, sculptured in stone and mosaic work on the walls.

Fig. 6 is from the plateau region of Central Mexico, sculptured stone, near Zochicalco.

Fig. 7 is from pottery of the Cliff Dwellers in Arizona or Colorado.

Figs. 8 and 9 are native ornamentation on a carved cocoanut shell and dish from Hiva-Oa and Fatu-Hiva Island of Polynesia

on stone in so many places, whether in Mexico or Peru, whether in Greece or at Baalbek, and worked upon textile fabrics and pottery in numerous widely separated regions. The accompanying illustration shows a few occurrences of these, which I have collected from various sources.

The same device occurs on the Guatemala Stelæ and on the façade of the Chichen Itza, Yucatan, ruins, and upon the pre-Inca monolithic doorway of Tiahuanako in Bolivia, and on the early Peruvian coast pottery, most of which are illustrated in this book. A combination of this design with a "stepped" pattern, or the stepped pattern alone, is also singularly prevalent. It is displayed at Mitla very prominently (Fig. 5 and general illustrations), and on the Peruvian coast pottery, and is part of the central hieroglyphic on the Tiahuanako doorway, and is seen on the belts of Peruvian natives (see page 234). This device must undoubtedly have some special significance, and it is interesting to observe it, figured upon ancient Oriental textile fabrics, one of which may be seen illustrated in the *Encyclopædia Britannica*, from the Victoria and Albert Museum, where around the edge of a carpet is the Mitla design almost exactly. These devices, as far as my observation goes, are found on the pre-Inca and pre-Aztec objects, but not on the Inca and Aztec objects themselves. In the publication mentioned there is also an illustration of an Egypto-Roman textile fabric of the third or

fourth century, showing the "Greek" pattern. It is not difficult to imagine this design as having been brought from Asia to America on the belts and clothing of wanderers (see also page 194).

One of the writers before quoted—Dr. Brinton—who is very positive as to the impossibility of a foreign origin, either of race, ornament, or theology, says: "The widespread belief that the American tribes are genealogically connected with the Mongolians is constantly directing the studies of many Americanists, very much as did at one time the belief that the red men are the present representatives of the 'ten lost tribes' of Israel. Neither in language, culture, nor physical peculiarities is there any affinity. American culture was homebred, and has borrowed nothing from either Europe, Asia, or Africa. Compare the rich theology of Mexico or Peru with the barren myths of China. The theory of Governments, the method of house construction, the position of women, the art of war, are all equally diverse, equally un-Mongolian. It is useless to bring up single art products or devices. The sooner Americanists generally, and especially those of Europe, recognise the absolute autochthony of native American culture, the more valuable will their studies become. It is no longer in season to quote the opinions of Humboldt and his contemporaries, as we know that the development of human culture is governed by laws with which they were unacquainted. The conclusion of Cuvier, who supported the American-Mongolian affinity, as

also that of Virchow, who maintained that the Eskimos are of Mongolian origin, cannot be supported"—according to Brinton.

One of the most universal symbols or ornaments found throughout many lands, whether of Asia or America, and belonging to varied periods, is the familiar form of the Swastika, popularly regarded as sort of good luck charm. It appears in Mexico, Peru, Java, Babylon, Greece, and elsewhere, in one form or another, and is of much interest. The device is one of the forms of the pre-Christian cross most frequently met with. The use of the cross as a religious symbol in pre-Christian times, it will be recollected, and among non-Christian peoples may probably be regarded as almost universal, and in many cases it was connected with some form of Nature-worship. The swastika is very widely distributed, and is found on all kinds of objects. "Ten centuries before the Christian era it was used in India and China as a religious emblem, and it is met with on Buddhist coins and inscriptions from various parts of India.<sup>1</sup> It is on record that a fine sepulchral urn found at Shroptian, in Norfolk, now in the British Museum, is ornamented with a swastika. This has "three bands of cruciform ornaments round it, the two uppermost of which are plain circles, each containing a plain cross; the lowest is formed of a series of squares, in each of which is a swastika." See also the illustration in the

<sup>1</sup> See article in the *Encyc. Brit.*

present book of the pottery of the Cliff Dwellers of Colorado (page 90).

In the illustration given of the "Greek" patterns the device of the swastika might appear to have formed the foundation of the ornament on the carved coconut shell from the Marquesas: a species of gammated cross enclosed in a circle. As mentioned in a former chapter, the swastika was found freely depicted on pottery from the ruins of the Cliff Dwellers in Arizona, and it has been encountered among aboriginal decorations on the coast of Maine. In the Vatican Museum there is "an Etruscan fibula of gold which is marked with the swastika, but it is a device of such common occurrence on objects of pre-Christian origin, that it is hardly necessary to specify individual instances. The same holds good with the cross as a device in various forms, often enclosed in a circle, and such are to be found in every important museum. The early Christians were ever eager to trace hidden prophetic allusions to the truth of their faith, and strove to find such in the pre-Christian cross," says the authority last quoted.

The burial-mound of Bharahat, about 120 miles south-west of Allahabad, when excavated in 1874 was found to contain a monument, one of the most imposing and handsome in India. "There were four entrances facing the cardinal points, and this gave the whole ground-plan of the monument, and no doubt designedly so, the shape of a gigantic svastika

(a symbol of good fortune). The age of the monument has been approximately fixed in the third century B.C." Persia is regarded as being the real home of the swastika, but some have looked upon the device as the remaining emblem of a vanished universal culture.

Brinton<sup>1</sup> says much that is of interest regarding the origin of such symbols. "My intention is to combat the opinions of those writers who assert that because certain well-known Oriental symbols, as the Ta Ki, the Triskeles, the Svastika, and the Cross, are found among the American Aborigines, they are evidence of Mongolian, Buddhistic, Christian, or Aryan immigration, previous to the discovery by Columbus, and I shall also try to show that the position is erroneous of those<sup>2</sup> who maintain that 'it is impossible to give a satisfactory explanation of the religious significances of the cross as a religious symbol in America.' They can be shown to have arisen from certain fixed relations of man to his environment, and therefore are of little value in tracing ethnic affinities."

This author then analyses the three-legged device of the Isle of Man, and traces its origin to Sicilian coins and those of Lycia in Asia Minor, struck five hundred years before our era, its occurrence on textile articles to-day in the latter region, and upon Slavic and Teutonic vases from mounds of the bronze age in Central and

<sup>1</sup> Brinton, "Sacred Symbols of America."

<sup>2</sup> Such as William H. Holmes, "Ancient Cities of the New World," Chicago.

Northern Europe. He reiterates its resemblance to the Chinese symbol of the Ta Ki, or "The Great Writer," and mentions that its occurrence in America has been taken by a French ethnologist as indicating the preaching of Buddhistic doctrines in the New World.

"This well-known form of the Svastika, or hooked or gammated cross, occurs, as has been pointed out often, in Greco-Italic and Iberian remains, and upon its archæological distribution much has been written and various origins or meanings assigned to it. Whatever its significance, we are safe in considering it a form of the cross. The widely spread mystic purpose



of the cross symbol has long been a matter of comment. In many parts of America the native regarded it with reverence anterior to the arrival of Europeans, as in the Old World it was long a sacred symbol before it became the distinctive emblem of Christianity."

In an interesting exposition the same writer draws the deductions that the before-mentioned emblems, which in varying forms are found scratched upon rocks or wood, or embroidered on buffalo robes and other fabrics in primitive North American art, are developments of a depicting of the sunrise, or sun-cycles. He gives the Aztec figure of the year-cycle in its principal

elements, taken from the atlas to Duran's "Historia de Nueva España," adding: "In this remarkable figure we observe the development and primary signification of those world-wide symbols the square, the cross, the wheel, the circle, and the svastika."

"The full analysis of this suggestive and authentic astronomy," adds Brinton, "will reveal the secret of most of the rich symbolism and mythology of the American nations. It is easy to see how it was derived from the Nahuatl doctrine of the Four Motions of the Sun, with its accessories of the Four Ages of the World. The Tree of Life, so constantly recurring as a design in Maya and Mexican art, is but another outgrowth of the same symbolic expression for the same idea. That we find the same figurative symbolism in China, India, Lycia, Assyria, and the valley of the Nile, and on ancient urns from Etruria, Iberia, Gallia, Sicilia, and Scythia need not surprise us, and ought not to prompt us to assert any historic connection on this account between the early development of man in the New and Old Worlds."<sup>1</sup>

Here, however, are some views in an opposite direction:—

"Humboldt also discussed the Mexican doctrine of the four ages of the world, belonging to water, air, earth, and fire, and ending respectively by earthquake, tempest, and conflagration. The resemblance of this to some versions of the Hindu doctrine of the four ages of Yuga is hardly

<sup>1</sup> See also p. 91.



to be accounted for except on the hypothesis that the Mexican theology contains ideas learned from Asiatics." <sup>1</sup>

The idea or occurrence of four as a sacred number has occupied the attention of various writers on Peru, among them a Peruvian savant, whose studies on ancient American lore have been profound, and whose opinions are worthy of credence.<sup>2</sup> This is Dr. Pablo Patron, from whom I will translate:—

“The number four appears as a sacred number in the Old Testament, and was also so considered by the primitive people of Babylon and Assyria. Many of the early civilised people of America have placed it in the same category. Is this merely accidental? I do not think so, or at least not as regards the early Peruvians. The Chaldeans and Egyptians divided the world into four houses or regions, according to the cardinal points and corresponding to four great gods. ‘Thothmes III. is styled the great king who has taken possession of the four regions of the world,’ according to Maspero and other writers, and from the very remote times of ancient Chaldea kings took the title of Lords of the Four Regions of the Earth, among them Naramsin. I believe, with other writers, that the earliest Chinese civilisation came, directly or indirectly, from Mesopotamia, and it is not surprising to find this conception of lord of the four regions of the earth among the ancient Chinese. The ancient

<sup>1</sup> Encyc. Brit., “Mexico.”

<sup>2</sup> Dr. Pablo Patron of Lima, “Notas Sueltas.”

Peruvians, still more strongly affiliated than the Chinese to that old culture, did what was to have been expected—divided their territory into four parts and gave a name to each one.”

Quoting Garcilasso, the Inca historian, the above writer continues:—

“The Inca kings divided the empire into four parts which they called Tahuantinsuyu, which means the four parts of the earth, corresponding with the four principal parts of the heavens—east, west, north, south. The people addressed their king on occasions as Tahuantinsuya Capac—that is, Master of the Four Quarters of the Globe. Those who maintain that this designation or partition of the earth began with the Incas are mistaken. It existed long before.”

The same writer also discusses the similarity of appearance between Asiatic races, especially in the matter of skin and hair, and the aborigines of America, which has been brought forward by many observers, and he adduces matters in connection therewith concerning the people of early Mesopotamia. He also draws comparison between the primitive craft of Peru and Mesopotamia and Egypt. The catamaran and rafts formed of inflated sheep or goat skins used in very remote times by the primitive navigators of the Mesopotamian rivers, and shown in bas-relief on the Assyrian palaces, and the mode of propulsion of these was similar to that used at the times of the Incas by the Indians on the coast of Arica in Peru-Chile in their craft formed of sealskins, and, indeed, used as late as 1730

by Valparaiso fishermen. He quotes Garcilasso to the effect that the Peruvians navigated this kind of craft in the same way as the Mesopotamians. He points out that the Changos of Atacama on the Chile-Peruvian coast still use these singular craft. He also shows how, in his view, the Quechua word for boat is derived from the Egyptian and Sumerian words.

It is to be recollected also that inflated rafts of this character were, and still are, employed in Mexico, on the rivers emptying into the Pacific coast. The catamaran is the native craft of the Pacific Islands of Polynesia. Another analogy is drawn between the rush vessels of Mesopotamia spoken of by Isaiah, the "vessels of bull-rushes upon the waters,"<sup>1</sup> and the rush canoes, junks, or *balsas* which were used by the early Peruvians, and are still a familiar feature to the traveller on Lake Titicaca. The Egyptians and Chaldeans used these craft in the same form, and one authority,<sup>2</sup> as is well known, likened them to those figured on the tomb of Rameses III. of Egypt.

The author before quoted<sup>3</sup> draws attention to the veneration both in early Bible history and among the Incas and pre-Incas for the "high places." It was the hill of Huanakaure, about two and a half leagues from Cuzco, where, the legend states, the golden sceptre of Manco Capac, the founder of the dynasty, sank into the earth as a sign of the ordained site where a

<sup>1</sup> Isa. xviii. 2.

<sup>2</sup> Castelnau.

<sup>3</sup> Dr. Pablo Patron.

tabernacle was to be raised by order of the Sun God, and which became the principal *huaca* or holy place of the Incas. He, however, argues that this was a pre-Inca institution, and shows how, in his view, the word Huanakaure comes from Assyrian and Sumerian words meaning "mountain-creator."

There is indeed much in fact, lore, and legend concerning the early Peruvians which transports us to the ancient cradles of civilisation on the Euphrates and the Nile. There are subtle breaths and whispers which have come down through the ages, and which may yet conceivably be wrought into some clear voice of history, when intensive thought and loving study shall have waked them from neglect and slumber.

## CHAPTER XIV.

### AN ENIGMA OF THE OCEAN

A speculative voyage—Stepping-stones to Asia—Easter Island, and others—Great stone images—The “wicked giants” of Genesis—Possible connection with Peru and Mexico—With Polynesia—Great stone houses—The archaic Noah—Size of the Colossi—Other remains—Tablets and hieroglyphs—Analogy with Tiahuanako and Bolivia—Are they phallic emblems?—Log of the *Flora*—Dimensions of the images.

WE have completed our survey, so far, of the great regions of early American culture: which way does our path lie now? Consciously, or unconsciously we have been looking to the West, but it is with some diffidence that we shall adventure forth to follow those threads of speculative imagination which seem to conduct us across the great Pacific towards the continent of Asia.

Yet, like great stepping-stones upon this path, thousands of miles apart, are lonely islands, strung out thinly between the New World and the Old, containing the ruins of strange monuments and structures of unknown builders, some of them absolutely unexplainable, almost appalling—like those especially of Easter Island—in their weirdness and peculiarity. The suggestion has been made from time to time and by different observers, that these far-scattered relics of

prehistoric stone-shaping man, extending westward into Polynesia and towards Asia, may be connected in some way with the builders of the megalithic structures of Mexico and Peru, and that must be our excuse for endeavouring to reach the Asiatic coast from America by the route of these mysterious islands.

These island remains are principally those of Easter Island, Pitcairn Island, Tahiti, the Marquesas, Tonga or Friendly Islands, Lele and Ponape, of the Caroline Islands, and the Marianas or Ladrões.

Some of these remote islands have been the scene of very extensive work by wall-building man, the vestiges of whose activities are no less curious than those already considered on the American continents.

To begin with Easter Island or Rapanui, which lies two thousand miles west of the South American coast of Peru and Chile, to which latter republic it belongs, and fourteen hundred miles east of Pitcairn Island. What shall be said of colossal stone images standing in rows facing the sea on this lonely land surrounded by the trackless, glittering ocean on every side? colossal images, the only explanation of whose fashioning is the fanciful one that they were made by a race of wicked giants, for whose punishment the Flood was brought about!

“For there were giants in those days,”<sup>1</sup> or at least we are so told on the authority of the Bible, and the singular theory has been advanced

<sup>1</sup> Gen. vi. 4.



EASTER ISLAND, STATUES FACING CRATER LAKE.



EASTER ISLAND STATUES.





that these great, hideous images were set up by them.

The great images of Easter Island are carved out of a grey, trachitic lava, quarried in the island at some distance from their position, and some of them are estimated to weigh up to 250 tons each. How were they cut and sculptured, and how were they moved from the quarry? We must ask the Pacific winds and waves; for the only theory or fancy, whichever it may be, is that these images are a relic of antediluvian days, of the world before the time of the archaic Noah. It has even been stated that there is evidence that a race of giants inhabited the island and that they were destroyed by some cataclysm, for it is demonstrable that the statue-builders were interrupted in their work.

The largest of these colossi is 70 feet high. A smaller image, 8 feet in height and weighing four tons, is in the British Museum, brought home years ago by a British warship. The illustration showing a man on horseback beside one of the figures on the island gives an idea of relative size, and the grim row of mighty stony visages and half-human trunks on the slope of the hill facing the extinct crater lake, like some arrested sentinels of the childhood of the world, strikes deep into the imagination.

The features of these images and the expression of their faces are said by some observers to be unlike any known type among the Polynesian peoples at the present time. Indeed, the prehistoric remains which occur on this and

other islands of the oceanic region involves one of the most perplexing problems concerning mankind in early times in the whole world.

The stone images are not the only wonderful archæological remains on Easter Island. Immense platforms of large, flat stones are found, then joints fitted together without mortar, generally built facing the sea upon slopes and headlands. The sea-faces of some of these structures are nearly 30 feet high, 200 to 300 feet long, and 30 feet wide, whilst some of the squared blocks of stone are 6 feet long. Huge stone pedestals exist on the land side of these platforms on a broad terrace, upon which once stood colossal stone images carved somewhat into the shape of a human trunk. On some of the platforms there are upwards of a dozen images, now thrown from their pedestals and lying in all directions. Their usual height is from 14 to 16 feet, but the largest are 37 feet, while some are only about 4 feet. The top of the heads of the images is cut flat to receive round crowns made of a reddish, vesicular tuff, found at a crater about eight miles distant from the quarry where the images were cut. A number of these crowns still lie at the crater apparently ready for removal, some of the largest being over 10 feet in diameter.

In addition to the images, there exist in one part of the island the remains of stone houses nearly 100 feet long by 20 feet wide. Their walls are built in courses of large flat stones without mortar, and are about 5 feet thick and



GIANT STATUE ON EASTER ISLAND.



over 5 feet high, lined on the inside with upright slabs, painted with geometrical figures and representations of animals. The roofs are formed by placing slabs so that each course overlaps the lower one until the opening becomes about 5 feet wide, when it is covered with flat slabs reaching from one side to the other.

The lava rocks near these curious houses are carved into the resemblance of various animals and human faces, forming probably a kind of picture-writing. Wooden tablets covered with signs and figures have also been found. "There are hieroglyphics chiselled on the faces of the tombs and on the crater walls, lines of curiously carved shapes and symbols, among which the shape of a fish constantly appears, and carvings which bear a remarkable resemblance to those of the ancient Aymaras of Peru."<sup>1</sup>

But how were these great works of sculpture made? The only ancient implement discovered on the island is a kind of stone chisel, but it seems impossible that the work could have been executed with such tools. Indeed, the whole subject is shrouded in mystery, and the present inhabitants of this small, remote Pacific island in the 109th meridian W. and the 27th parallel know absolutely nothing of the construction of these remarkable works which surround them, although they have some legends about their own origin. These traditions are that they came from other islands in two large canoes, in remote times, their king, Hotu Metua, or "Prolific

<sup>1</sup> From an account published in the London press in 1906.

Father," in the one and their queen in the other ; and when they arrived they termed the land *Te Pito Fenua*—that is, " The Land in the Midst of the Sea." These doubtless were Polynesians, who were wonderful voyagers.

It has been suggested that the fish carvings may indicate that these early immigrants held sacred some fish-god, somewhat as in the case of the early Peruvians. It is to be recollected that the large stone statue of Tiahuanako, near the Peru-Bolivia boundary, has a fish sculptured on its breast, as described before. Dr. Alfred Russel Wallace, in a letter<sup>1</sup> bearing upon this subject which he wrote me, speaks of " the resemblance of human sculptures on some of the earliest stone buildings of Bolivia with the Easter Island statue in the British Museum." This statue, it will be recollected, was brought to England some forty years ago by H.M.S. *Topaze*. " I was greatly struck by the resemblance," he says, " and in the drawing of the large gateway in Bolivia there are figures whose features resemble the very peculiar features of the Easter Island monuments, and have a very curious Caucasian aspect."

To me, this grim idol, standing in the murky, untrodden colonnade of the British Museum, has somewhat the aspect of a gigantic negro. In some respects it is well sculptured, and there is a singular device upon its back. The fellow image is much smaller and dilapidated.

What can be the significance of these grim

<sup>1</sup> December, 1911.



STONE STATUES OF EASTER ISLAND.





statues? No people could have erected them out of mere caprice. Is it possible that they had any phallic <sup>1</sup> significance and were erected by the "Prolific Father" of the legend, or by the wicked giants, or the "Sons of God" spoken of in Genesis in commemoration of their amours with the "daughters of men" in that extraordinary account? This, however, is but a fancy.

The island was visited in July, 1906, by H.M.S. *Cambrian* and *Flora*, and the Admiralty kindly sent me an extract from the log of the latter vessel, in which the commanding officer wrote as follows:—

"The images on the platforms, of which Cook and La Perouse wrote, have all fallen down and been broken, but many are still standing at the base, up the side, and inside the crater of Mount Hoty-iti, from which they are cut out; these, however, have no crowns; the crowns of the fallen images are lying near them.

"I measured the largest image cut out of the rock, lying on its back, and the back not yet detached from the stone of the hill:—

				Ft.	In.
Total length ...	...	...	...	68	0
Total width ...	...	...	...	10	0
Length of nose ...	...	...	...	11	3
Width of lip ...	...	...	...	5	7
From lip to chin ...	...	...	...	7	3
Chin projects from neck ...	...	...	...	3	0
Length of ear ...	...	...	...	12	2
Height of forehead ...	...	...	...	6	0
Width ...	...	...	...	9	6

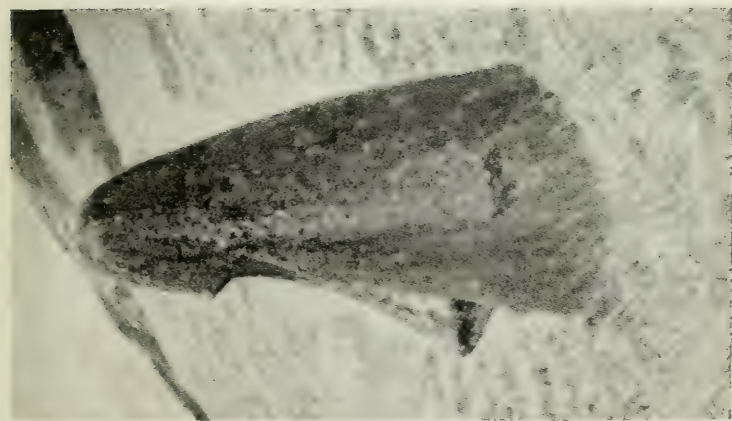
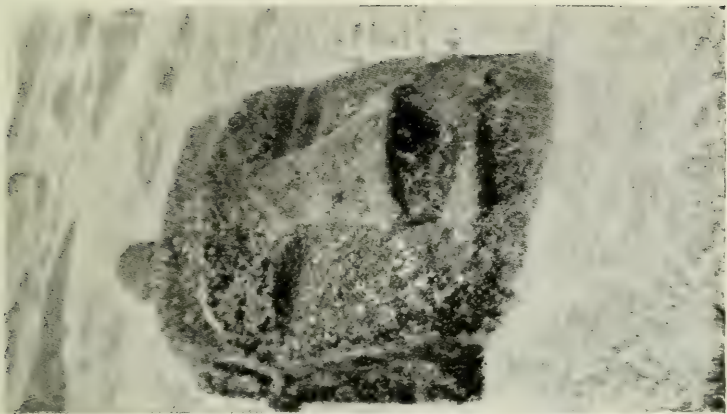
<sup>1</sup> See p. 325.

“The illustrations of the images in ‘La Perouse’s Voyages’ are very good; those in Cook’s do not at all do them justice.

“The stone houses, in appearance like inverted canoes, mentioned by La Perouse, have entirely disappeared, but there are stone huts on the south-west edge of the summit of the volcano Ranakao built out of layers of basaltic rock; interior dimensions, 15 feet by 8 feet by 6 feet high, but with the entrance so low it is only possible to crawl in on the stomach. Near these huts are inscriptions on the rocks, and some of them have hieroglyphics on some of the stones forming their sides. Captain Cook mentions as a peculiarity that the natives drank seawater. A previous manager to the present one began building a wall right around the island to prevent the sheep getting to the sea, as he thought they drank it and that it would be harmful; as a matter of fact, at various places on the seashore there are fresh-water springs at sea-level, uncovering at half-tide, and no doubt both natives and sheep were aware of this and drank fresh, not salt, water.

“Most of the image platforms are more or less broken, but the facings of huge stones remain, and under these morais may be found skeletons and flint spearheads, &c.

“The red tuff crowns of the images do not look as though they were cut out of rock, and I was told there is no similar rock to be found on the island—they look as though they were made of red volcanic clay and sun-dried.



CARVED HEADS OF GIANTS, EASTER ISLAND.



“ Fish, and sea crayfish or spiny lobster, are fairly plentiful.

“ Partridge (Chilian) are numerous on the island; they are not in coveys, and both in feather and habits seem akin to Californian quail. Tame cats run wild are the only wild beasts, except the cattle which on the north and north-east of the island are practically quite wild.

“ From the positions at which the platforms with the images were placed, namely, overlooking coast indentations where there were possible landings, it seems probable that though these images may have been memorials to the dead, they were also intended to intimidate the living and frighten any strangers away from the island.

“ The anchorage of Ovinipoo is in 17 fathoms, half a mile from the shore, and well protected from any winds but SSW. to ESE.; the boats can get into a small cove, protected by an outer ridge of rock, for landing passengers, but the climb up the rocks is awkward.”

The question as to what, if any, relation the stone-shaping art of the unknown people of Easter Island had with that of the early Peruvians is one which doubtless will come up for consideration in the future. It has been said that if the story written in these hieroglyphics of Easter Island could be read the veil might be lifted which shrouds the mystery of the early people of the Andes.

Easter Island, however, is singularly remote, and few travellers reach it. The present in-

habitants grow bananas, sugar-cane, &c., and keep a few goats. They number about one hundred, and are all Christianised, as the result of a Jesuit Mission in 1864. There is at least one link with Peru, in that the Peruvians, in 1863 barbarously kidnapped and carried off a large proportion of the inhabitants to work in the guano diggings on the Chincha Islands off the Peruvian coast. Guano, like rubber and gold, has not failed to take its toll of human lives.

Easter Island does not stand alone in its mystery. There are, as already stated, other works of unknown hands, equally remarkable, as will be described in the following chapters.

## CHAPTER XV

### THE MYSTERIES OF THE ISLES

Strange migrations—The Polynesians and others—The Papuans and Malaysians—Mystery of their origin—The Caucasians—Origin of the Polynesians—Clever navigators—Original home—Long sea journeys—Polynesian ship-builders — Mythology — Decline — Character — Pitcairn Island—Tahiti—The Marquesas—Affinity with early America—Stone images—Stone platforms—Art—Tonga Islands—Megalithic remains—Caroline Islands—Lele and Ponape—Astonishing prehistoric structures—Metalanim—A Pacific Venice—Yap and other remains—Great basalt prisms—Metalanim harbour—Lele—The breakwater—The Marianas—Stone structures.

THE Oceanic isles of the Pacific undoubtedly have been in remote times the scene of some of the most remarkable migrations by water in the history of the world. Unsolved problems of emigrating and navigating races, black and brown, with whispers of sunken continents and severed archipelagoes, form the romance of these regions.

These widely separated islands have been peopled by three different peoples, the Melanesians, the Polynesians, and the Micronesians, forming two distinct divisions of mankind—the dark and the brown races. The Melanesians

sometimes go by the name of Papuans, the Malay name for the inhabitants of New Guinea, the principal home of the race. These people are physically of negroid type, nearly black, with flat noses, thick lips, and curly hair, and are regarded as the aborigines of Oceania, and constitute the oldest ethnic stock. They agree with the African negroes, and have a more or less remote connection with them. How these negroids came to occupy the oceanic region is a mystery. How did they reach these isolated Pacific Isles? For it is a remarkable fact, which makes their colonising all the more mysterious, that the blacks are unskilful sailors.

The Polynesians, the brown people, on the contrary, were clever navigators, and there is evidence of their wanderings and canoe voyages.

Whilst it is held as certain that Polynesians are an older ethnic stock than their black neighbours, they nevertheless must have migrated to the Pacific Islands at much later periods than the Malays or Papuans and their sub-families; and the view generally adopted is that they represent a branch of the Caucasian division of mankind, who at some very remote period, perhaps in the new Stone Age, migrated from the mainland of Asia.

This migration appears to have proceeded via the Malay Archipelago, those "desirable islands" which have formed the theatre of action of many roving peoples, and which at some early time of man's history on the earth were probably connected by land-bridges with each other. The



first inhabitants of these islands were probably the black woolly-haired race, the Papuans, who gradually colonised the Eastern Pacific.

The Polynesians are of a light brown colour, tall and well proportioned, with regular and often beautiful features, and in some cases are the physical equals of Europeans—or at least this is the case in Samoa and the Marquesas. Although both the brown and the black peoples living here had, in all probability, Asiatic ancestors in common, the Polynesian is to-day as he has ever been, a distinct race. Dr. Wallace, the great authority upon this subject, informed me as his opinion that there must have been “a stream of migration from East tropical Asia, where remnants of Caucasian races still exist, and these, intermixed perhaps with some Malay tribes, produced the fine Mahories of Samoa, the Sandwich Islands, and New Zealand.”

No doubt, in fact, is felt as to this migration, but the first advent of the Polynesian people into the Pacific must have occurred in times so remote that it cannot be fixed even by tradition. To cover such vast distances their migrations must have been made in stages, and, as stated, the earliest halting-place was in Malaysia, where some of their kind still remain on the west coast of Sumatra, from which point they extended eastwardly. It is held that the absence of Sanskrit roots in the Polynesian languages would seem to indicate that the migration of these Caucasians was in pre-Sanskritic times.

But whilst no one has yet ventured to approxi-

mate a definite date for these early movements, the history of the Hawaiians, or Sandwich Islanders, has been traced to the fifth century, and from this it is adduced that their departure from Malaysia or the Indian Archipelago may be put at the first or second century. Savaii, the largest of the Samoan Islands, is by tradition assigned as the Polynesian ancestral home in the East Pacific, and this is supported by linguistic and other evidence. From this point the Polynesians, or the various branches of the race, must have made their way in all directions.

Of all the people so far considered in these islands or continents of the Pacific Ocean, the Polynesians were the principal navigators. Their migrations by sea, were they fully known, might furnish material for romantic adventure second to none, and, indeed, the journeyings of their known history are of great interest and have been well described by various authors.<sup>1</sup> It is certain that their skill in building vessels and their dexterity as navigators has declined since the white man from Europe associated with them. Rather than increasing their knowledge and powers from European seafaring nations in such matters, they appear to have lost it. Formerly they built decked vessels of planks, caulked and pitched—seaworthy craft capable of making voyages with one or two hundred persons and the necessary stores. They had a knowledge of the stars, and were able to direct their course thereby. And thus it was that they journeyed

<sup>1</sup> Especially "Journeyings of the Polynesians."

so far from the Indian Archipelago, taking advantage of westerly winds at certain seasons, which enabled them to overcome the obstacles of prevailing easterly winds and currents.

The Polynesians were not a savage race when they entered the Pacific, but, as their elaborate historical legends show, possessed a considerable civilisation, from which to-day they have deteriorated. They were strict in their barbaric religious observances, which came into the acts of their every-day life. They were polytheists, but had a conception of a god of a high order—Tangaloa—regarded as “the first and principal god, uncreated and existing from the beginning, or from the time he emerged from the world of darkness.” He was said to be “the father of all the gods and creator of all things,” but was not considered an object of worship. As to their ideas of immortality, the Polynesians invariably believe in the existence of the spirit of man after the death of the body.” In some islands idols, bearing more or less resemblance to the human shape, were made. Sometimes large stone enclosures or a grove were made around them.

We are reminded, in these vague conceptions of a Creator, of the “Unknown God” of the Mexicans and the Peruvians once more. The Polynesians had the same cannibalistic custom as the Aztecs, of eating a portion of a slain enemy, for reasons of triumph or religion. Like the early American people, they have suffered at the hands of European civilisation, in strong

drinks, the too sudden adoption of European clothing, and the "deadening effects of a sombre type of Christianity, in which over-zealous missionaries suppressed the dances and free, joyous life of pagan times." Thus they decreased rapidly, although greater toleration of late has, in places, arrested the decline, and, says a recent authority, perhaps the "noblest of all primitive races—Maoris, Samoans, Tahitians—may yet be saved to fill their place in civilisation."

Observers generally speak very highly of the Polynesians. "Several South Sea Island races are not now savage in any sense, except as to rarity of trousers and absence of novels, and never deserved that epithet in its sense of ferocious. There is no finer people on earth than the Tongans and the closely related and but slightly less vigorous Samoans. The physical beauty of both sexes is paralleled by their intellectual development. The grace of manner and general dignity of bearing habitual with members of chiefly families could not be surpassed in the most polished of European Courts. The contrast in these respects between the natives of high birth and the proselytising and trading white men who come to 'civilise' them cannot escape the notice of the least observant. They are as passionately attached to their independence as the Swiss or the Netherlanders ever were to theirs. There is much that is most attractive in the kindly communism of the island tribes, and not a little that is economically sound. When a civilised nation takes over the adminis-

tration of some group of islands, there is ingratitude as well as impolicy in ignoring the fact that the institutions of the natives have provided the new Government with a ready-made system of poor relief. The question of old-age pensions had been settled by the islanders long before white men came amongst them. It would be interesting to be informed by authorities on economics where co-operative agriculture has reached a more effective development than it has in some South Sea Islands.”<sup>1</sup>

There is much of interest in these matters of social economy among people whom we have too often termed “savages”; and the way in which they made use of natural resources, land, water, &c., as in the case of the Incas of Peru, is, I submit, certainly worthy of study by the industrial communities of to-day. How some of these gentle, courteous little kingships and queenships gave place to the blatant dominion of modern commercial people brings to my mind the resemblance of poor Queen Liliuokalani of Hawaii and her pathetic pilgrimage to the United States. I was in San Francisco at the time, and well remember the outpourings of the yellow journals on the subject.

The author last quoted says: “To even a callous heart there must be something shocking in the case of the gracious, kindly, and intelligent Samoans serving as the shuttlecocks of rival gangs of money-makers in a hurry to grow rich.

<sup>1</sup> Sir Cyprian Bridge, in his Introduction to “The Caroline Islands,” Christian, London, 1899.

Belisarius begging for an *obolus* was not a more piteous spectacle than Malietoa Laupepa, with his seven hundred years of chiefly pedigree, accepting a dole of salted pork."

The foregoing does not pretend to be more than a very brief sketch of the black and brown people of Oceania, the Melanesians and Polynesians, sufficient to give an idea of the inhabitants of the region where to-day still exist the remains of the stone structures we have now to observe. There is a great deal of interesting literature about the Polynesians, and it is to be hoped that even fuller investigations about them will be made before they disappear, if such is the destiny before them, as prophesied by some writers.

Leaving these considerations, however, we shall now visit the various island groups which lie between America and Asia, after leaving Easter Island. The first, as far as the purpose of this book is concerned, is Pitcairn Island, the nearest point in Polynesia which we reach, going westward from Easter Island some 1,400 miles, and lying in latitude 130° 6' W. Pitcairn Island belongs to Great Britain, and is famous in connection with the mutineers of the *Bounty*. It is a beautiful island, but rises abruptly from the water with steep cliffs of basaltic lava, without coral formation. It was discovered in 1767. The matters of prehistoric interest on the island are chiefly in the remains of carved stone pillars or images of a somewhat similar character to those of Easter Island, and the same problem remains

unanswered as to who were their sculptors. Stone axes also are found in the soil, and "skeletons with a pearl-mussel beneath the head." The people living on the island, descendants of the mutineers, Polynesians, and others, govern themselves—as a British colony—by a Council chosen among themselves.

Another 1,400 miles to the north-west takes us to Tahiti, of the French Society Islands,  $149^{\circ} 30' W.$ , among whose customs and structures we might easily halt a while in the pursuance of our theme. We read that the natives of Tahiti buried their chiefs in the temples; their embalmed bodies, after being exposed, were interred in a crouching position. Mention is made of a pyramidal stone structure, on which were the actual altars, which stood at the farther end of one of the squares. In the great temple at Atahura the stone structure was 270 feet long, 94 feet wide, and 50 feet high, and its summit was reached by a flight of steps built of hewn coral and basalt. "Sacrificial offerings, including human sacrifices, formed a prominent part of Tahitian worship. The images, which are less remarkable than those of Hawaii, were rough representations of the human form carved in wood." There is a whiff of early Mexico about this, its stone altars and bloody priestcraft.

A thousand miles or more to the north of Pitcairn and of Tahiti lie the Marquesas, tropic islands far out of the track of the ordinary traveller.

A recent writer <sup>1</sup> considers that there may have been some connection between the people of the Marquesas and those of early America, but he does not give any particular evidence in support of the theory. Some native decorative work perhaps seems analogous. He says: "The Marquesan legends reflect a strange, gloomy cast of thought. Many of their rites, costumes, dances, and customs would seem to argue an intermixture with the red races of America, possibly with some of the tribes of Mayapan and Yucatan. . . . A thorough study of Maori and Marquesan tattoo signs might supply a clue to the origin of the Hydah carvings of British Columbia and Vancouver Island, and even of the mysterious writings and sculptures of Palenque and Chichen Itza, and thus throw light on the annals and histories of the buried cities of Yucatan. . . . In this connection I will go farther still, and remark that in my opinion the terraces and statues of Easter Island, the Peruvian buildings of Caxamalca and Titicaca, the ruins of Angkor-Thom in Cambodia, of Brambanam, Boro Bodo, and Modjo-pahit on Java, the Passumali monoliths of Sumatra, the great island-Venice of Metalanim or Ponape, the canals and Cyclopean walls of Lele, and the Langi and Druidical Hamonga of Tongatabu, may be all, to use a homely expression, 'pieces of the same puzzle.'"

The natives of the Marquesas are a pure Polynesian race, usually described as physically

<sup>1</sup> "Eastern Pacific Islands," Christian, London, 1911.



the finest of all South Sea Islanders. Their traditions point to Samoa as the colonising centre from which they sprang. Their complexion is a healthy bronze. Their houses are unlike those usual in Polynesia, in being built on platforms raised from the ground.

At this point it may be well to recollect that the "red" race of America, North and South, is not "red." The Indians of America are brown; there is no subdivision of mankind really which is "red." The Indians of Arizona and California, equally with those of Mexico and Peru, are not red, and might well be described as a "healthy bronze."

The houses of the people in Hiva-oa, in the Marquesas, are curiously built, and are described as follows by the last-quoted writer: "We go past deserted *paepaes*, or stone platforms, and *paepaes* as yet undeserted. One remarkable native house attracts our attention. The platform stands about 7 feet high, with several massive blocks of basalt, curiously carved, set into its centre as it faces the road. On one of these a gigantic fish-hook is sculptured in relief: it is the emblem of Tuha, God of Fishes and Fisheries. Nowadays the natives build their houses somewhat carelessly, but the principle of the underlying stone platform remains the same. Some of the more ancient *paepaes* must have cost tremendous labour, built as they are of dozens and dozens of ponderous basalt blocks laid together with the utmost nicety. They built mightily in Hiva-Oa of old. I have noted a

somewhat similar style of house-building upon the island of Ponape, the inhabitants of which show indisputable traces of a Polynesian mixture."

It is stated that the upper part of the vale is "thickly studded with massive *paepae* or stone platforms, showing clear evidence of the numbers and enterprise of the vanished children of the soil, whom tradition declares to have been the fiercest and most warlike of the clans of the island. . . . Far up in the valley, near the residence of the local queen, is an old sacred enclosure, a most interesting relic of a grey antiquity, within which, surrounded by a devil copse of coffee shrubs, planted of late years, stand two giant stone figures, the statues of Taka-li and his wife, a monarch of might, when the Pahatai, the 'People of the Beach,' were a powerful clan, about the time of the great migration from Hiva-oa to Tahuata Island by the sons of Nuku, some forty generations ago." †

In the illustration, from a photograph, given in the above work it is stated that the statue is about 8 feet in height. Possibly it may be that all these rude stone images and idols bear a certain resemblance to each other, but there is an air about this image which seems reminiscent of the stone figures of Tiahuanako, on the Andean highlands of Titicaca. In the Marquesas we have the same conditions of a decaying race as in the Andes. Robert Louis Stevenson in his writings draws a mournful picture of the

† "Eastern Pacific Islands," *ante*.

decay of the Marquesas Islanders, and it is held that it is due to the physical and moral retribution of cannibalism partly, or mainly, and that the profligacy and immorality of the whites have also contributed to this decline.

Upon the ornamentation of the work of these people of the Marquesas, as shown on their carved coconut and rosewood dishes, is the "Greek" pattern, which is reproduced here (see page 245), such as is so marked a feature of the ruins of Mitla in Mexico, and of ornamentation and sculpture in prehistoric stone and textile fabric in both Mexico and Peru, as characteristic of design in many parts of the world, as mentioned elsewhere. The zigzag lines, also supposed to represent sea waves in Egyptian hieroglyphics, occur in the Marquesan decoration, as well as in Peru and Mexico. Ornamentation upon a frontlet of carved turtle-shell, given by the writer last quoted, shows the square sculptured idol form which so easily carries the mind back to analogous forms in ancient America and Asia. The *pahi*, or "raft-boat," of Tahiti somewhat resembles the *balsa* of Peru, it is said.

Continuing our westward course for 1,800 miles from Tahiti, we reach the Tonga or Friendly Islands, slightly to the south of Samoa, and about 1,000 miles north of New Zealand. At Tongatabu, or "Sacred Tonga"—longitude about 175° W., the largest of the group—there are some ancient stone remains, such as burial-places built with great blocks, and a remarkable monument consisting of two upright blocks

mortised to carry a transverse one, on which was formerly a circular basin of stone. These great stone blocks must have been brought by sea. As we have seen, Samoa, not very far to the north of Tongataba, was the principal home of the navigating Polynesian people, and Savaii, the largest island of the group, the centre from which they dispersed over the Pacific, from Hawaii to New Zealand. They carried the name Savaii in various forms to Tahiti, Hawaii, the Marquesas, and New Zealand, did these Samoan wanderers.

Traversing a vast distance from Samoa—3,000 miles perhaps—to the north-west, passing other groups of islands, we reach the Caroline Islands. Here are massive prehistoric stone remains, colossal structures which cannot have been erected by the present Melanesian or Polynesian peoples. They form part of a system whose wide diffusion, which extended as far as Easter Island, approaching the New World, points to the occupation of the Pacific by a prehistoric race with considerable pretensions to general culture.

At Lele and Ponape, islets of this group, the last named some 2,300 miles from the coast of Japan, exist remarkable structures which are a puzzle to archæologists and ethnologists. In the islet of Lele there are ruins which present the appearance of a citadel with Cyclopean ramparts built of large basaltic blocks. There are also numerous canals, and what look like artificial harbours constructed amid the shallow lagoons.

In Ponape the remains are of a similar character, but on a much larger scale, and different in that those of Lele stand all on the land and those of Ponape are built in the water. The whole island is strewn with natural basaltic prisms, some of great size ; and of this material, which must have been brought by boats or rafts from a distance of 30 miles, are great walls, put together without any mortar, and sustained only by their own weight. All the massive walls and other structures on the last side of the island are built of these basaltic blocks. The walls of the main building near the entrance of Metalanim Harbour form a massive quadrangle 200 feet on all sides, with inner courts, vault, and raised platforms, with walls 20 feet to 40 feet high and 8 feet to 10 feet thick. Some of the blocks are 25 feet long and 8 feet in circumference, and weigh from 3 to 4 tons. There are also numerous canals from 30 feet to 100 feet wide, while a large number of islets, mainly artificial, covering an area of 9 square miles, have all been built up out of the shallow water of the lagoon round about the entrance of the harbour, with high sea-walls composed of the same basaltic prisms. The walls of this "Pacific Venice," as this remarkable place has been termed, are partly submerged in some places, and this has given rise to the idea that the land has subsided since these extensive structures were built. This, however, is doubtful. But it is generally agreed that these structures could not possibly have been the work of any existing

Polynesian people, and they can only be attributed to some extinct prehistoric race, doubtless the men of the new Stone Age, who emigrated from the Asiatic mainland long ago in the dawn of history.<sup>1</sup>

These great structures at Ponape are described in several books, the most recent being that by an author, whose work on the Eastern Pacific has been quoted;<sup>2</sup> and the following is the opinion as to their origin by an authority on those regions, before quoted, Sir Cyprian Bridge, who says:—<sup>3</sup>

“ I have ventured to form the opinion that the great Ponape and Kusaie ruins are not those of buildings erected by the races at present inhabiting the islands. Whether the ancestors of the present Ponapeans or an earlier people built the great island-Venice at Metalanim, it will not, I expect, be denied that the builders must have vastly outnumbered the existing population. The same may be said of every Pacific island on which prehistoric remains are found. A tradition of a larger population in early times is very common in the South Seas, and there is evidence beyond that supplied by the ruins to support it.”

Other islands of the Caroline group are of interest as regards these ancient stone structures. The island of Yap, surrounded by a coral reef thirty-five miles long, “ is full of relics of a vanished civilisation—embankments and terraces, sites of ancient cultivation, and solid roads

<sup>1</sup> See article in Encyc. Brit.

<sup>2</sup> Christian.

<sup>3</sup> Sir Cyprian Bridge, in Christian's “The Caroline Islands.”

neatly paved with regular stone blocks, ancient stone platforms and graves, and enormous council lodges of quaint design. Inland are extensive swamps laid out in plantations of a water taro, the *Colocasia* of the Nile Valley.”<sup>1</sup> The “stone money” of Yap, huge calcite disks 6 to 12 feet in diameter and weighing up to five tons, are a remarkable feature. They are quarried in the Pelew Islands two hundred miles to the south, but those which existed before the advent of Europeans must have been brought in native vessels or rafts.<sup>2</sup>

In Ruk and Hogolu, other small islands of this group, the inhabitants of the coast are described as of a light reddish-brown, and one of the curious customs of these people is that of “piercing the lower lobe of the ear and hanging a heavy ornament therein, causing it to expand downwards to an enormous size—a custom observed also in the Visayas of the Southern Philippines, among the ancient Incas of Peru, and the Polynesians of Easter Island.”<sup>3</sup> This was a noteworthy custom in early Peru, and is kept up to-day by one of the forest tribes of the Peruvian Amazon region, the Orejones, who were in close contact with the Incas.<sup>4</sup> I have given an illustration of this in my book on Peru. The same custom prevails among one of the tribes of Central Africa.<sup>5</sup>

<sup>1</sup> Christian, *ante*.

<sup>2</sup> Encyc. Brit.

<sup>3</sup> Christian, “The Caroline Islands.”

<sup>4</sup> “Peru,” London, 1909.

<sup>5</sup> See illustrations in *Geographical Journal*.

The description given by Christian of the Ponape and other remains is of much interest, and according to his view there are matters in connection with these works and the inhabitants which are analogous with the early Peruvians. "Villages, valleys, hills, and streams have their *genius loci*, and the Ponapeans, like the Quechuas, people their swamps, mountains, and forests with spirits—gloomy, malignant, or beneficent. "All these *ani* are honoured under the guise of some special bird, fish, or tree, in which they are supposed to reside, which they style their *Tan-waar*, literally canoe, vehicle, or medium (like the Vaa or Vaka of the Polynesians, the Huaca or Vaka of the Peruvians). In their mythology they also have a subterranean Tartarus—a gloomy conception very much resembling the Yomi of Japan and the Yama of the early Vedas." It may be worth while to recollect here the canoe-shaped houses mentioned on Easter Island in this connection.

The above-named writer describes the "Pacific Venice":—

"Ancient platforms and tetragonal enclosures of stonework, a wonder of tortuous alley-ways, a labyrinth of shallow canals, grim masses of stonework peer out from behind verdant screens, and passing the southern barricade of stones we turned into the ghostly labyrinth of this city, of the waters, and straightway the merriment of our guides was hushed and conversation died down to whispers. We are close to Nan-Tanach (the place of lofty walls), the most remarkable



of all the Metalanim ruins. The water-front is faced with a terrace built of massive basalt blocks about 7 feet wide, standing out more than 6 feet above the shallow waterway. Above us we see a striking example of immensely solid Cyclopean stonework frowning down upon the waterway, a mighty wall formed of basaltic prisms, for it is now low tide in this strange water-town. The left side of the great gateway yawning overhead is about 25 feet in height and the right some 30 feet. In olden times the outer wall must have been uniformly of considerably greater height, but has now in several places fallen to ruin. Somewhat similar in character would be the semi-Indian ruins of Java, and the Cyclopean structures of Ake, and Chichen-Itza in Yucatan. A series of huge steps brings us into a spacious courtyard, strewn with fragments of fallen pillars, encircling a second terraced enclosure with a projecting freize or cornice of somewhat Japanese type. The outer enclosure measured some 185 feet by 115 feet, the average thickness of the outer wall was 15 feet, varying from 20 to 40 feet in height. In the inner terraced enclosure lies the great central vault or treasure-chamber identified with the name of an ancient monarch known as Chau-te-reul or Chau-te-leur. *Chau* was the ancient Ponape word denoting (*a*) the sun, (*b*) a king. The latter signification tallies with the Rotuma *Sau*, a king, and the Polynesian *Hau* and *Au*, a king, chief."

In the above-quoted work the only photo-

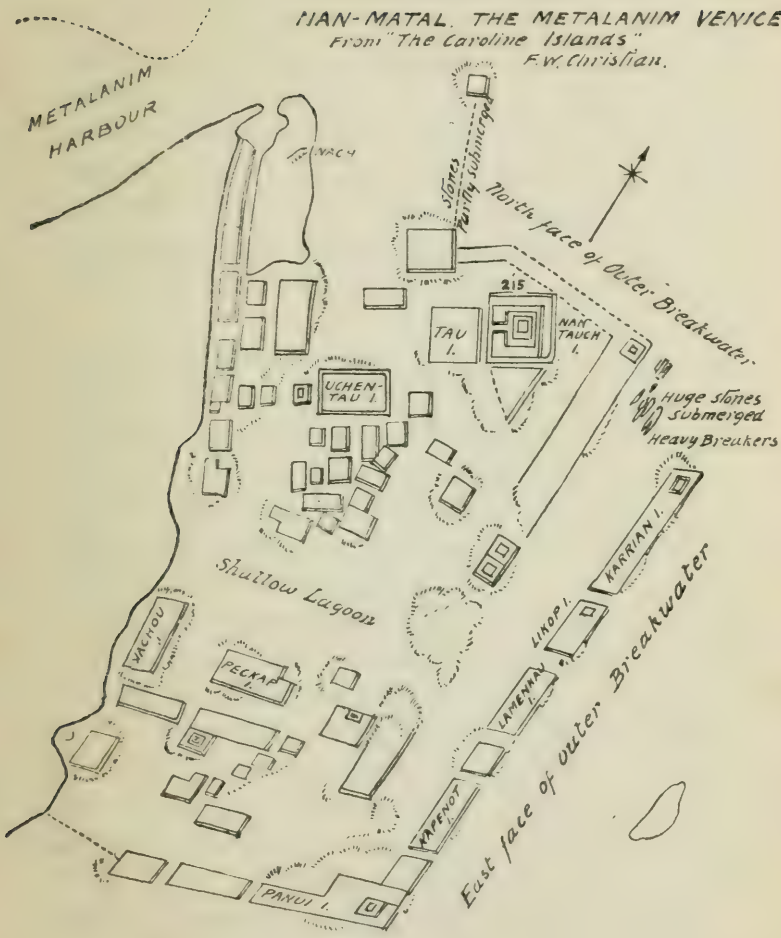
graphic views given are of walls formed of basaltic prisms, without apparently any shaping or sculpture, and it is difficult to see what similarity they could present with the Chichen-Itza in Yucatan, with their beautifully sculptured and elaborated façades. It is perhaps worthy of mention that the word *chau*, Ponape for sun, might seem to have some analogy with Panchou, meaning sun, also "god," I believe, in the Quechua language of Peru, as mentioned elsewhere.<sup>1</sup> Tao-Te was one of the early Mexican names for God, and has been likened to the "Tao" of China and the "Tua" of the South Sea Islands. We have it in Teotihuacan, the sacred city of the Toltecs; also the Taos of Ecuador.

It is explained that "Chau-te-leur is the name of an ancient king or dynasty of kings in Metalanim, when Ponape was under one rule, and the great walls of Nan-Tanach, the break-water of Nan-Moluchai, and the sanctuary of Pan-Katara, and the walled islets near Tomun were built by the divine twin brethren—the architects Olo-Sipa and Olo-Sopa. The last of them, defeated in battle by barbarian hordes from the south, under Icho-Kalakal, perished in the waters of the Chapalap River, near the great harbour and was turned into a blue fish, the *kital*, which to-day is a taboo fish."

The suggestion is also made that the great basaltic blocks for the above described structure were put in place by means of an inclined plane, a slope of tree trunks sluiced with coconut-oil, and

<sup>1</sup> See p. 240.

SKETCH PLAN OF  
 NIAN-MATAL, THE METALANIM VENICE  
 From "The Caroline Islands"  
 F. W. Christian.



that they were rafted from the north coast of the island. Ropes made of green hibiscus bark and solid staves and handspikes with relays of workmen may have hoisted the masses up to the suggested plane. Among the articles found by digging were circular rose-pink beads, minute and delicate in design, formed of shells rubbed down, and "answering exactly to the *wampum* or shell bead money of the North American Indians. Beads exactly similar in design have recently been discovered in the ruins of Mitla, in Central America."

Massive sea-walls and breakwaters are features, as before mentioned, of these structures. "Out in the lagoon off the harbour mouth the magnitude of the task of the early builders impressed us deeply. For three miles down to the south<sup>1</sup> one can descry here and there the massive sea-walls showing out through the mangrove clumps which girdle the islets of Karrian, Likop, Kapinet, and others. There are over fifty walled islets which, together with the intersecting canals, occupy some eleven square miles." An ancient native fortress is described, terraces and a pyramid with a great lodge on its summit, platform "very much like one of the Mexican *teocalli* or truncated pyramids."

On the textile fabrics depicted of these people appear patterns which seem to bear some similarity to some of Mexico and Peru, and their weavers appear to be as dexterous in their weaving with leaf and banana fibres as the

<sup>1</sup> Christian, *ante*. See plan.

natives of Ecuador and Peru are in the so-called Panama hats and the *ponchos* of vicuña wool.

The ruins of Lele are described as far rougher and ruder in design than those of the east coast of Ponape, "but the great walls and enclosures, gateways, and canals attest the enormous work performed by these unknown Titans. Some of the stones are 10 feet long, 4 feet deep, and 3 feet thick." The structures are overgrown, and in many places the canals have been filled up by the natives in recent times.

"At Painu we launched a canoe and soon found ourselves across close inshore to Nantamarui. Cautiously poling over the flats and through the narrow channels in the salt-water brush, we reached Nantiati just as the moon rose over a wild, picturesque scene, lighting up league upon league of hill and valley, the forest-line trending downwards until lost in the dark and eerie zone of mangroves which rustle around us, dipping their long forked root-sprays into the muddy water like the claws of famished spectres groping for their prey. Outside the hut is a pile of enormous basalt slabs like a heap of colossal ninepins shadowing the still canal in the silvery moonlight. The most striking prism of all measures 12 feet in length. It has six sides or faces, each measuring 3 feet. One end seems to have been rudely chipped into the semblance of a human head. Another ponderous mass almost as long is resting upon the top of the rugged blocks, for all the world like a giant club, by the waterside. It recalls the huge frag-

ment topping the pile of half-submerged blocks near the Nan-Moluchai breakwater. At sea again, about midnight, we are once more in the heart of Nan-Matal, threading the labyrinth of narrow canals intersecting the rows of walled islets of the water town. We pass Peikap, Chaok, Tapan, and Nan-Pulok, catching stray glimpses of massive masonry looming up, dark and imposing, behind the waving screen of jungle, a vivid contrast of shifting lights and shadows."

From the Caroline we travel a thousand miles, more or less, to the north-west, towards the coast of Japan, and reach the Marianas or Ladrone Islands. Here we encounter further remains of the pre-historic wall-building people, especially in the Island of Tinian. Among these remains are two rows of massive, square, stone columns, about 5 feet 4 inches broad and 14 feet high, having heavy round capitals. According to early Spanish accounts cinerary urns were found embedded in these capitals. No complete explanation of the existence of these remains has yet been forthcoming, and they are wrapped in the same mystery that surrounds Easter Island and the others which have been described.

The author before quoted speaks of the small pyramids and truncated cones, on the top of which are placed half-spherical bodies, which are encountered in the islands of the Mariannes, especially in Guahan, Saipan, and Tinian. They vary from 3 feet to 13 feet in height, and were used as burial-places or cairns. On Tinian

Island they are described as facing each other in two parallel lines like a regular street. One had upon its summit a *semi-esfera* or half-spherical body two and a half metres in diameter, and one a large bowl about 5 feet in depth. The pyramids are of rubble cemented with mortar, formed of burnt coral and sand.

Whether the problem involved in the origin of the remains of these various groups of islands will ever be solved it is difficult to say. Most of them, of course, are very remote, and comparatively few scientific travellers visit them. Systematic investigation of such matters is beyond the reach of the ordinary purse, and it would seem that at present there is a lack of those men who combine a love of archæological research with considerable wealth, who would undertake the equipping of expeditions to these distant places. Surely these great ethnological puzzles would give way before the combined attack of brains and money. But have we to-day, investigators of the type of Humboldt, who could combine his world-covering energy and knowledge with a sufficiency of means?

## CHAPTER XVI

### THE LOST CONTINENT

A Pacific "Atlantis"—India and Java—Early Malaysians—Early Polynesians—Strange voyages—Connection with Peru and Mexico—Timor—Delhi—Tasmania—The Malay Archipelago—"Out of the sea"—A wide-scattered people—Malay sailors—Hindu ruins in Java—Bou Budur—Indian influence—Angkor Thom—The Khmers of Cambodia—Astonishing ancient temple and ruins—Brama faces—The Ainos of Japan—The hot-pot of Asia—The Mongolian in America—Kublai Khan—Mongolia—Tibet and Peru—The Veddahs of Ceylon—Australia's part in the secret—Caucasian fragments—Mankind's vast antiquity—Ancient land connections—Elevation and subsidences of Pacific shores—Japan—The Andes—Markham's theory—The Funafuti borings—Darwin and Murray—The "subsidence" theory—The new Stone Age—The inexplicable problem—Change of the earth's axis.

MORE like the evanescent adventures and palaces of fairy tales than things of the realm of actuality are these migrations and habitations of the bygone peoples of the Pacific Isles.

The question of how those early folk arrived thither, how they built such stupendous structures in such small places, and why they did so is not entirely satisfied by the history and traditions of migrations by sea, movements



whose beginnings were in that remarkable region of Malaysia after one of those remote periods when Asia "boiled over," as it has done in the past and doubtless will do in the future. Is there, in addition, any other solution or supplementary proposition?

It has been thought by some students that a continent formerly existed in the Pacific—a sort of Pacific Atlantis—which subsided, leaving only island-peaks to mark its place.<sup>1</sup> Upon this matter we shall dwell subsequently, but first it is necessary to consider further the early migration of those people who inhabit these regions.

According to one writer, the Chinese (Fu-Hien) visited Java in the fourth or fifth century B.C., and it is known that from the first century of the Christian era there were migrations of people from India. "The Javanese Babads tell of an Indian prince who came to Java about 78 or 120 A.D., where he found a nomadic people. Chinese infiltration probably began long after 220 B.C. Arabian traders voyaged to the East Indian Archipelago long before the time of Mohammed. A mixture of Proto-Malayans with Indonesians, whom we may call Proto-Polynesians, drifted into the West Pacific, and gave to the black, woolly-haired natives their language and some elements of higher culture, the resultant mixed people being the Melanesians. Later migrations fared farther into the Pacific, and the Samoan Islands appear to have been their first centre of dispersal within the Pacific; later

<sup>1</sup> Fritson, "Globus," 1907, quoted by Haddon, *ante*.

Tahiti and Raratonga were starting-points for fresh discoveries. It is believed <sup>1</sup> that the parent stock of the Polynesians can be traced to India about 450 B.C. and that a migration took place to Java in 65 B.C. In 600 A.D. Polynesians were living in Tonga-nui and Samoa. Hawaii was first settled in 650 and the Marquesas was probably occupied twenty-five years later. In 850 New Zealand was visited and definitely occupied in 1350. "Some idea of the enterprise of these remarkable navigators in their sailing canoes may be gathered from the fact that, inspired by the voyage of Ui-te-rangiora to the Antarctic Seas in 650, Te Aru-tanganuku three hundred years later sailed in search of the wonders of the deep. He reached the land of snow and described icebergs, sea-elephants, and the large ponds of the bull-kelp. Even the remote Easter Island was colonised, but there is no evidence that Polynesians reached the coast of America," says a recent authority.<sup>2</sup>

The matter of Polynesian influence in Mexico or Peru is one which has been debated, and were it possible to establish its truth, a link would be created between Asia and America indeed. It is the opinion of Dr. Alfred Wallace that a stream of migration from East tropical Asia, where the Veddahs of Ceylon, the early Temple-builders of Cambodia, and the Ainos of Japan,

<sup>1</sup> Smith, "Hawaiki: the Original Home of the Maori," 1904.

<sup>2</sup> "The Wanderings of Peoples," Haddon, 1911, from which the above passage is abstracted.

forming remnants of the Caucasian races, which emigrants in conjunction with Malay tribes produced the Mahoris of Samoa, Hawaii, and New Zealand, reached South America and were the origin of the Incas of Peru.<sup>1</sup> Further proofs of these migrations might solve, to a great extent, the Secret of the Pacific.

Timor, "the island of the Malay Archipelago," some 500 miles to the north-west of Port Darwin, in the northern territory of Australia, merits here a word of mention. The inhabitants are Papuans, much mixed with Malayan and perhaps Polynesian elements, and are described as a fine race over six feet tall, noted for their artistic sense. Of this island an author quoted before says: "Timor was anciently an important point in the migrations of the Malayan race, in whose calendar *Timor* is still preserved to denote the East Quarter, side by side with the more modern term 'Masrak' (Arabic *Mashrik*). As variations of the ancient Malayan geographical name denote different points of the compass, so we may safely take Timor to have been one of the early homes of the Malayo-Polynesian, ere they dispersed themselves, wave upon wave, flotilla upon flotilla, on their long ocean wanderings. The little town Dilli is the Malayan form of *Delhi*, wondrous city of palaces, one of the numerous Sanscrit place-names which have come floating down into Malayan on untold waves of migration."<sup>2</sup>

<sup>1</sup> In a letter to me, already quoted.

<sup>2</sup> Christian, "The Caroline Islands."

The black, woolly-haired races, as already described, were the first inhabitants of the Malay Archipelago, which doubtless has been divided into islands during the human period. The recently extinct Tasmanians were of this race, the ground-stock of the Melanesians—people who “walked from New Guinea to Tasmania.”<sup>1</sup> This was, as a glance at the map will show, a long “walk.”

The Malaysans themselves, the dominant race of the Malay Peninsula and of the Malay Archipelago, are of mysterious origin. Though in their lands this brown race have enjoyed for a thousand years the position of the dominant people, they all possess a tradition that they are not indigenous and that their first rulers “came out of the sea,” and it has been shown that they possessed a certain amount of civilisation before ever they set foot in Malaya. Until recently eminent scientists held the opinion that they were of Mongol stock, and resemblance was noted between the Malay and Mongol physical characteristics,<sup>2</sup> but a more generally accepted theory is that the Malayan race is distinct and came from the South, until it was stayed by the Mongolian race living on the mainland of Southern Asia. Their language, crania-measurements, and hair, moreover, are distinct from the Mongolian races. The theory is now supported that they form a distinct race, and had their original home in the South. Where that home

<sup>1</sup> Haddon, “The Wanderings of People.”

<sup>2</sup> Dr. Wallace, “Malay Archipelago.”

lay it is not easy to say, but the facts recorded by many writers as to the resemblance between the Malayan and Polynesian races, and the strong Malayan element found in the Polynesian languages, have led some students to think that the two races may have had a common origin. One writer attributed the fact of linguistic analogies to the casting away of ships manned by Malays upon the islands of the Polynesian Archipelago, but this does not satisfactorily account for the same Malayan words appearing in localities so widely separated as they are, and the theory is more generally held that the two races are allied, and may at some remote period of history have shared a common home. "It has been suggested that their separation did not take place until after the continent which once existed in the North Pacific had become submerged." <sup>1</sup>

Thus it has ever been conjectured that there existed some shadowy continent in the North Pacific, which has disappeared beneath the waters, and that separation of those races took place at that time, the Malays wandering northwards, whilst the Polynesian race spread itself over the islands of the southern archipelago. This, although admittedly a speculative view, is the most recent upon the subject. In any case the Malays are now a race scattered widely and without political coherence, conditions which are one of the puzzles of the ethnographer, and which time must solve.

<sup>1</sup> See Encyc. Brit., "Malays."

The present home of these people is in the extremity of the Malay Peninsula, the islands of Java, Sumatra, and Borneo, and others of the Malay Archipelago, and, still farther afield, the Philippines and Madagascar. Even the inhabitants of most of the South Sea Islands, whether Hawaii or New Zealand, speak languages showing Malay influence in the past. It has been adduced from this that the Malays have not now a continental character, but that by nature or circumstance they are "a seafaring race with singular powers of dispersal, which has caused them to spread over the ocean from some island centre, perhaps Java." The great number of Malays as sailors on British ships is a witness to the seafaring tendency of these people. It has also been advanced as a recent theory that the stream of migration proceeded from the extreme West, of which a great linguistic group, which included the Malay, Polynesian, and Micronesian languages and some others furnished the source.

These considerations about the Malays have brought us to Asia, but only very briefly can we enter upon the complicated and shadowy movements which concern us here, movements which have already been touched upon.

In the history of the Asiatic Malays three periods have been considered by the ethnologists: the first included that of the semi-barbarous Dyaks, the second that of a Hindu civilisation which penetrated the Malay Peninsula and reached Java and Sumatra and other islands.

This was superseded by Islam in the beginning of the fifteenth century.

The Hindu civilisation left some astonishing ruins in Java, numerous and splendid temples and monastic buildings, chief among them the famous Boro-Budur. These ruins would require and, indeed, have a literature to themselves, and we shall not enter upon them here. It has been stated that if the statues and bas-reliefs of the hill or temple of Boro-Budur were placed side by side they would extend for three miles. This type of architecture is a type which reached a high standard without the use of mortar, and in that respect reminds us of early America.

The sphere of Indian influence is a vast one, including Indo-China, much of the Malay Peninsula, Tibet, and Mongolia. Much of the origin of its art is stated to be Greek, "derived from the Perso-Greek States on the north-west frontiers of India." Indian alphabets have spread to Tibet, Cambodia, Java, and Korea, notwithstanding the chapters afforded by the huge ruins. The history of Indian civilisation in Indo-China and the archipelago remains obscure. As to Cambodia this formed the relatively ancient Khmer Kingdom, much reduced in the last few centuries. The remarkable ruins, dating possibly from A.D. 800 to 1000, show, as in Java, the earlier powerful existence of Hindu influence. Most notable are the royal city of Angkor-Thom, which was completed about A.D. 900, and the temple of Angkor Vat, in the first half of the twelfth century A.D. These ruins are situated

in forests on the banks of the river: walls, palaces, temples, terraces, pyramidal religious structures, magnificent reliefs, elaborate system of galleries, the last rectangular in the arrangement and enclosing a cruciform structure, at the centre of which rises a huge tower with a circular base, and at intervals are fifty towers, decorated with quadruple faces of Brahma—such are some of the features of Angkor-Thom. Angkor Val is the best preserved example of Khmer architecture, with a paved causeway leading under a magnificent portico, staircases, sanctuaries, towers, galleries, representations of gods, men, and animals on every flat surface. The stone was cut into huge blocks—principally sandstone—fitted together without cement, like those of Java. The ancient civilisation of the Khmers was destroyed about six hundred years ago, but its astonishing ruins were only made known to Europe in 1858. Hundreds of gigantic faces of Brahma are the characteristic features of the great temple of Baioñ, whose interior walls contain nearly eleven thousand figures of men and animals. The temple, according to native history, was built in 250 B.C. and the people who built also made “great lines of roads equal to those of the Romans.” For more than two thousand years there was then, in the south-eastern peninsula of Asia, a dense population of various races, ruled over by a highly civilised superior race of undoubted Caucasian type, and the Khmers who still exist amid these surroundings are high above any people of the Mongol race.



In Dr. Wallace's book,<sup>1</sup> from which some of the above particulars are taken, there are photographic reproductions of these marvellous buildings, which are of great interest. As has been shown, Dr. Wallace maintains that these early temple-builders of Cambodia, intermixed with others, produced the fine Mahori race, whose offshoots reached South America and were the origin of the Incas of Peru and Bolivia. Full of allurements are these mysterious problems of the past.

As is the case of the Cambodians so is that of the Ainos of Japan, as having formed part of the human material whose immigrating offshoots reached America, according to the same authority. These, the aborigines of Northern Asia, do not provide any material for their history, although there is some record of the migration of later races superimposed upon them. "The Chinese came from the west, though how far west is unknown. The Hindus and Persians came from the north-west, the Burmese and Siamese from the north. We do not know if the Mongols, Turks, &c., had any earlier home than Central Asia, but their extensive movements from that region are historical. The antiquity of Asiatic history is often exaggerated. With the exception of Babylonia and Assyria, we can hardly even conjecture what was the condition of this continent much before 1500 B.C. The advancing Chinese and Aryans were in conflict with earlier races. The influ-

<sup>1</sup> "Studies Scientific and Social," vol. i.

ence of Babylonian civilisation was probably widespread. Some connection between Babylonia and China is generally admitted. China has moulded the civilisation of the eastern mainland and Japan, without much affecting the Malay archipelago. In its outer sphere of influence are Mongolia, Tibet, Siam, Cambodia, and Burma, where Indian and Chinese influences are combined, the Indian being often the stronger. The distribution of the Mongolian group in Asia offers no particular difficulty. There is complete present, and probably previous, long-existing geographical continuity in the area over which they are found, with considerable similarity of climate and other conditions throughout the northern half of Asia which they occupy. The extension of modified forms of the Mongolian type over the whole of the American continent may be mentioned as a remarkable circumstance connected with this branch of the human race."

"The relation to Asia of the pre-European civilisations of America is one of those questions which admit of no definite answer at present, though many facts support the theory that the semi-civilised inhabitants of Mexico and Central America crossed from Asia by Behring Straits and descended the West Coast."

The foregoing passage, abstracted from the article on Asia in the new edition of the *Encyclopædia Britannica*, is of extreme interest as showing the most recent thought upon the Asiatic influence in America in pre-Columbian times, and certainly may be taken as combating the

negative opinions of last century, some of which I have quoted in this book.

The word Mongolia conveys perhaps to the ordinary reader but a vague impression, and nothing but a study of the map of Asia can give a clear idea of the extent and position of the country. The Mongols were those formidable nomads who swarmed over Central Asia, China, India, and Europe, and performed such astonishing conquests from the beginning of their known history in 619 A.D. A dependency of China, it has an area of 1,350,000 square miles, and about 3,000,000 people, but, due to the possible disruption of China, it seems that a further change in its fortunes will occur. It is divided geographically by the huge desert of Gobi, largely unexplored. In the thirteenth century the Mongol power under Kublai Khan conquered China. The possibility of an influence upon Peru has been discussed elsewhere. The Mongol dynasty in China lasted less than a century, but the Ming, the native Chinese dynasty, which succeeded it, reigned for nearly three hundred years and sent out expeditions—as Kublai Khan had done—to remote regions, including India, Ceylon, and East Africa. The Manchus followed from 1644 to 1911, and it was on the 29th of December, 1911, the overthrow of this and the election of China's first president of a republic was announced.

The illustrations given in this book of natives of the Quechua districts of Peru, may, as before mentioned, be compared with the Tibetan and

Mongolian faces. Wanderers from Tibet might, indeed, have felt at home in Peru, with its remote towns on lofty plateaux, in the heart of snowy mountains: a land so similar to their own. Is it possible that the opening up of the great unknown regions of Asia, and study of its desert cities and ancient manuscripts will yield some clue towards the solution of the Secret of the Pacific? <sup>1</sup>

To turn from Asia now, for a brief glance at Australasia. There are in many parts of Southern Asia semi-barbarous races who represent the very earliest types of mankind, as far as known, such as the Veddahs of Ceylon and other tribes in China and Malaysia; and some of these are analogous, it is held, in some respects with the Australians—a connection which, if it really existed, must be of so remote a period as that when land communication was very different. In discussing the probable origin of the Australian race Dr. Wallace says that the aborigines of Australia differ remarkably from those of all surrounding countries, while they agree so closely among themselves in every part of the continent that they evidently form a single race. Although their features are coarse they are far less so than in the negro races. In colour they are a deep copper or chocolate, never sooty

<sup>1</sup> Perhaps something in this connection may be hoped for from the researches of Dr. Aurel Stein, whose book "Ruins of Desert Cathay" has been published, and in which are mentioned twenty-nine cases of manuscript and objects of Graeco-Buddhist and other art, from a chapel walled up for 900 years, brought home by him to the British Museum.

black as in the negro ; hair long, glossy, black or very deep auburn, wavy or curly, luxurious moustache, beard, whiskers, usually of an auburn tinge. These characters give to the face a familiar appearance, resembling the coarser and more sensual types of Western Europeans, whilst they are totally removed from any of the beardless Malayan and Polynesian tribes or the woolly Papuans. If we turn to habits and customs for some light as to their probable derivation, we must go far beyond the limits of all surrounding people. Analogy has been drawn between customs which are common to Australia and Africa. More interesting is the fact that the peculiar Australian weapon, the boomerang, finds its nearest representative in Abyssinia and among the ancient Egyptians. This may indicate that the weapon had a wider range in early times, but can hardly be held to prove identity of race. Considered broadly, and without prejudice, the Australians belong neither to the Negroid nor to the Mongoloid types of man, while in all essential characters they must be classed as Caucasians. If we look abroad for other isolated fragments of the same type, we find one in the Ainos of Japan. These singular people agree wonderfully with the Australian type, but are somewhat more hairy and of a lighter colour. They are also in a more advanced stage of material civilisation, and are probably on a somewhat higher intellectual and moral plane.

Other fragments of the same great primitive race exist in the Khmers and Chams of Cam-

bodia, who are said to be decidedly Caucasian in type, while their language has affinities with those of Polynesia, where also Caucasian affinities are shown, especially in some of the inhabitants of Micronesia. Of all these widely scattered Caucasian fragments we must look upon the Australians as the lowest. Their antiquity, in all probability, is very great, since they must have entered their present country at a time when their ancestors had not acquired the arts of making pottery, houses, bows and arrows, of tilling the soil and domesticating animals.<sup>1</sup>

The same author describes the remarkable cave-paintings and sculptures found by Sir George Grey in the valley of the Glenelg River in North-West Australia—life-size figures in blue, red, and yellow, some with a head-dress or halo, and letters and characters having an Oriental aspect; also a sculptured human head about 2 feet in length, the singularity of which is that it is perfectly European in type. On Chasm Island are other figures, and two large square mounds formed of loose stones, but perfect parallelograms in outline, placed due east and west. It is possible that converts of the early Jesuit missionaries may have been wrecked on this coast and executed these works, but whoever it was certainly they were not done by the aboriginal Australian.

The conclusion reached is that the Australians are really of Caucasian origin, and this accords

<sup>1</sup> "Australasia," Wallace, Stanford's "Compendium of Geography and Travel," 1893.

with all the facts of the case ; and since it has been admitted that even some of the darkest Hindoos are nearly allied to Europeans, there is less improbability in the existence of some more archaic and less developed examples of the same type.

“ It also accords with all we are now learning of the vast antiquity of the human race, since if all the tribes now living can be classed in one or other of the three great divisions of mankind, Negroid, Mongolian, and Caucasian, or as probable mixtures of them, we are impressed with the conviction that we must go back to periods to which the earliest historical dates are but as yesterday in order to arrive at an epoch when the common ancestors of these three well-marked types alone inhabited the earth. Even then we shall have made no perceptible approach to the ‘ missing link ’—to the common ancestors of man and the higher quadrumana.”<sup>1</sup>

Such are, then, some of the currents and cross-currents in the movements of mankind in these vast regions, of which the present work has endeavoured, even if in a fragmentary way, to remind the reader, hoping that he will go to the real fountain-heads of knowledge on the subject, from which this fragmentary résumé is compiled. It remains to consider, briefly, the changes on land and water that have occurred in the regions here concerned, where the possibilities of some ancient universal culture may have been responsible for the strange monuments

<sup>1</sup> Wallace, *ante*.

we have considered—some lost Pacific and Atlantic continents: a matter which has been touched upon in an early chapter.

Science is still divided as to the earlier arrangement of land and water in many parts of the globe. Geology shows that parts of what are now continents formed, long ago in the earth's history, portions of the bed of the ocean, while what are now islands were in some instances connected with their adjacent mainlands. They were even joined as land masses, the sites of which are now occupied by the open sea. Thus there may have been land connection between Australasia and South America, and between South America and Africa—North Brazil and North Africa. North and South America were formerly disunited, during the greater part of the Tertiary period until the later Miocene or Pliocene period, at some epoch of which a connection was established between the twin continents by way of the Isthmus of Darien, and northern animals passed over this land-bridge, from North America, including, probably, llamas, horses, mastodons, and perhaps opossums, at that time of zoological distribution. Of course, the horse, mastodon, and opossum disappeared from America, whilst the llama, the hoofed ruminating quadruped of the humpless camel tribe, is found nowhere except in Peru and Bolivia to-day. But, as it has been well said, "we must not construct bridges without being sure of our points of attachment," at least as regards the South America-Africa connection. It has also been



said that camels and horses may have originated in the New World, but there seems at least an equal probability that Central Asia—or a land common to Asia and America—may have been their birthplace. “In pre-Tertiary times—probably cretaceous—Australia was united by land with Asia. The connection of Australia and South America by means of a mid-Pacific continent may have existed, and the early Tertiary Atlantic ‘Hellenis’ may have been in contact with Guiana on the one side and tropical Africa on the other.”

If, however, such land connections existed only before man appeared, and these subsidences took place in the Tertiary period before the dawn of human life, they are not factors which can solve the present problem. Some authorities maintain that there have not been any particular changes in the bed of the open Pacific since the Palæozoic era, nor that any particular part of the huge space over which the waters of the Pacific flow to-day has ever been uncovered, that both as regards elevation above sea-level and depression below it no great change has occurred.

Probably, however, more is yet to be learned on this point. It is known from careful observation that the east coast of Japan is slowly rising, and trustworthy maps show that Tokio Bay extended much more deeply to the north in the eleventh century than now, and that low-lying districts, thickly populated to-day, were formerly under water. Similar phenomena have been laid

bare in other parts of the country. Asakusa—named from an edible seaweed, which fact gave rise to the discovery of its altered position in regard to tide-water—is now three miles inland. The mountain country of Kasusa-Awa “emerged from Tokio Bay as an island, and a current ran in a north-westerly direction between this island and the northern mountain margin of the present plain towards the north-east into the open ocean.”<sup>1</sup>

When we come to the other side—the American side—of the Pacific basin we find that very marked changes of elevation have occurred, and possibly within the human period. It is known that portions of the Andes and the North American Cordillera have been raised and that other parts have sunk. It is even conjectured that the highland region of Peru and Bolivia may have been elevated since the building of the megalithic structures of the pre-Inca people; and one of the arguments adduced is that these buildings exist in a region where now timber does not grow and where maize will not ripen. An interesting paper upon Peru, recently given by one of the most eminent authorities on the subject before the Royal Geographical Society,<sup>2</sup> dealt with the matter in some detail, and the question raised again of how a site for a city of the considerable importance which the ruins of Tiahuanako show existed there—long before the Inca period,

<sup>1</sup> Naumann, quoted in the *Encyc. Brit.*, “Japan.”

<sup>2</sup> Sir Clements Markham, May, 1910.

for the Incas knew nothing of its origin—could have been selected where food supplies were not available. Some of the cut and carved monoliths of these ruins are unequalled in size in any part of the world, it is stated, except Egypt. It was argued that 1,000 feet elevation would have been sufficient to account for the phenomenon, the ruins being at present at about 12,000 feet above sea-level. My own part in this discussion<sup>1</sup> was to the effect that it seemed difficult that stones so delicately poised upon each other as are found in these ancient walls could have escaped displacement in such a prodigious earth-movement. Further, the ancient Castle of Chavin, in Northern Peru, stands upon the banks of a stream, as, apparently, it was built, and it seems difficult to suppose that this stream could have flowed on unaltered as before if the whole region had suffered elevation.

As to the very recent upraising of the Andes geologically, there is no question whatever. The mountains, vast and grand as they are, are the "newest" in the world perhaps, and some authorities have stated that they had no existence even in so late a period as the Cretaceous. Quoted also was the Huarochiri myth that "when Huirakocha was here our land was Yunca." The first-named place is an elevated region; the last is upon the coast, and embraced the Chimu kingdom, ruins of whose epoch have been described. Indications of the upraising of the Andes are as an open book to the traveller. The huge

<sup>1</sup> *Geographical Journal*, October, 1910.

fossil ammonites and cephalopods which I observed and sketched,<sup>1</sup> existing in large numbers in the limestone strata at 14,000 feet elevation, some of them 3 and 4 feet in diameter, were, of course, denizens of the sea-bottom once. Also the huge masses of shell conglomerate in those high upland regions bear eloquent witness. Bones of mastodons have been found at 13,000 feet in Bolivia, and gigantic fossil ant-eaters in what is now desert. The great peak of Illimani, 21,204 feet elevation, is fossil-bearing to its summit. There are, in brief, many indications of the recent and rapid rise of the mountain chain of Andes from the ocean, parts of it undoubtedly within the time of man's habitation of the region; and that it is still rising is also shown. In other places at its extremities the chain has, on the contrary, become submerged, as in the south of Chile; whilst the North American Cordillera, in Alaska, has sunk and remains in places as tree-covered island-tops. Darwin maintained that the Peruvian coast had risen 85 feet during the time of human life there, as shown by Indian remains.<sup>2</sup>

As to the theory of the subsidence of land areas in the Pacific, this was substantiated to some extent by the borings undertaken in 1897 at Funafuti. This island is a typical atoll or coral island in the Ellice group, and was selected as the scene of operations made by the expedition sent out by the Royal Society of London.

<sup>1</sup> See my book "The Andes and the Amazon."

<sup>2</sup> "Coral Reefs," Darwin.

The purpose was to test, by means of a deep boring, the question at issue between the Darwin and Murray theories as to the formation of such atolls. Darwin's theory was that of "subsidence." He argued that coral islands must have a rocky base, upon which the corals build, as coral-builders do not flourish below a depth of 20 fathoms; and that it was inconceivable that there could exist in the Pacific so vast a number of submarine peaks or banks rising to about that depth below the surface and none above it, but that the deep coral reefs must have been formed as subsidence proceeded. The borings, made to a depth of 1,114 feet, established this theory as mainly correct, or at least for that part of the Pacific; and therefore Funafuti would appear to have been formed in an area of subsidence.

Reliable authorities consider that probably the large groups of low-lying islands in the Pacific and Indian Oceans have been formed under the same conditions, and that such subsidences may have taken place within the time of man. The Funafuti borings established beyond doubt that Polynesia is within an area of comparatively recent subsidence, and it is argued that land connections were formerly more continuous, and might have afforded easy passage to migrating peoples.

In this connection it is to be recollected that the people of the new Stone Age overran the earth in early times. The dolman-builders occupied both Korea and Japan, and from these

Pacific-fronting lands of Asia it would have been easy for them to spread over the Polynesian region, in the same way that they ranged over Europe—Scandinavia, Great Britain, and Ireland—leaving us many legacies of their art, such as Stonehenge and other monuments. “To the men of the Neolithic Age, then, represented in Polynesia, perhaps, by the more light-complexioned and regular-featured of them, it is reasonable to attribute the astonishing structures scattered about the regions described. That these remains assume so many different forms is doubtless due to their varying environment, but it is remarkable that they appear generally to be so out of proportion with the restricted places whereon they are encountered. It is natural to suppose that if a partial subsidence of these culture areas did take place, the culture would be bound to degenerate with its narrowed locality.”<sup>1</sup>

Thus it is that, interwoven with man's inhabiting of these wave-lapped Pacific islands, coasts, peninsulas, archipelagoes, there have been mighty geological changes. What is the real explanation of these things? What unrecorded Noahs have journeyed on these waters? However it may be, there are, throughout these regions, as it has been well put, “echoes of sublime theogonies and philosophies which are still heard in the oral traditions and folklore of the Polynesians.”

<sup>1</sup> See Encyc. Brit.

## CHAPTER XVII

### WORLD-WIDE AFFINITIES

The voice of mythology — A new science — Analogous romances—The psalms of the Mexicans and Peruvians—The Creation myth of the Hydahs—The “Redeemer” of the Nootkas—The copper canoe—Emblems of the Sun God—Flood story of the Okanagans—Scomalt—Deluge story of the Melanesians—Qat the hero—Prayer of the voyager—General belief in a Supreme Being—Sun-worship—Roman Catholic mythology—Aboriginal belief in immortality — Curious customs — The *couvarde* — Phallism—“Indecent” Inca images—Singular custom in Peru—Scarab-worship of the South American Chaco—Native veracity—Travellers’ veracity—Missionaries’ good faith—Flood stories—The Book of Enoch and the Deluge—Theosophy and the Central American ruins.

THE field of mythology and the numerous theogonies of the regions which surround the Pacific Ocean—North and South America, Polynesia, Australasia—is one which yields a great amount of detail in endeavouring to establish a connection between the Old World and the New, and doubtless it will, in the future, furnish more abundant material for analogy as it becomes more studied and recorded.

It is to be recollected that until a comparatively recent date the study of mythology

was but a desultory science. It was "hampered by orthodox notions and traditions, and even more so by our lack of knowledge of the real natural history of man and ignorance of the ancient languages." Until very recent times these long-perished tongues, such as the Babylonian, Egyptian, and Sanscrit, were books sealed and hidden, and it is only as a result of concentrated and painstaking effort—as in every other advancement of knowledge—that the wise men of the West have been enabled to master their secrets. Further, the science of anthropology, the study of the development or evolution of human institutions from those dark ages of primitive savagery towards civilisation, is a new one, as far as welding it into a system goes.

Probably in the future the mystery of the distribution of analogous myths and ancient stories, practically similar, all over the world, and among widely separated races, will be explained. We shall have to account not only for the origin and existence of these strange myths, but also for their presence, apparently independently, among nations. No one at present can affirm that these myths and traditions may not have spread from a single and common source, on the one hand, or affirm that they were not independent inventions on the other.

Without, however, proceeding farther at this moment upon that line of thought, let us cast a glance at some of these religions or mythologies of America, Polynesia, and Australasia, and at some of the curious customs which seem



to offer a link of universal connection, as if derived from some early and world-wide cosmogony. We have Creation stories, Flood stories, fables of virgin births and of shadowy Redeemers in great profusion. The prayers and supplications of some of these prehistoric and existing peoples are worthy of the utterances of David or Solomon, veritable psalms of beauty and chaste earnestness. We shall always be reminded, in studying them, how strongly Nature and natural phenomena appealed to the primitive mind, how greatly such entered into their lives. They cultivated an abstract world which we of the "machine age" of the advanced nations have left behind at present; they were in touch with Nature in a way which we have lost, but to which we shall inevitably have to return before we can expect to learn much more about the origin and destiny of the human race. This will come, and having shed the superstition of the savage, gross as it was, and the selfishness of the moderns, brutal as it is, we shall attain to greater knowledge. Let us not despise the "savage" races or their mythologies; they afford useful lessons for us.

The religious systems of the Mexicans and the Peruvians have been considered in the chapters devoted to those particular cultures, and they were the most advanced of any obtaining among the peoples that look over the Pacific, and, indeed, were in some respects the equal of the Oriental nations. The prayer of the Mexican prince Nezahualcoyotl, the "Solomon of

Anahuac," in which his oppressed spirit questions the use of false gods, acknowledges and insists upon the existence of a supreme being, and seeks consolation for those acute sufferings of the spirit which philosophy brings, has been quoted, and it is only one of various prayers of that time and place. The beautiful Inca address to the Creator is one which similarly arrests the attention, as asking for support and enlightenment amid the doubts and shadows of the dark and difficult world in which thinking man of whatever age or country finds he is plunged, and from which he can only escape by the exercise of the things of the mind.

The Hydah Indians of British Columbia believe in a Solar Spirit as the great Creator and Supreme ruler.<sup>1</sup> They do not compare this spirit with the material sun, which is regarded as a thing apart. This reminds us of the Inca beliefs. The Nootkas, the neighbouring British Columbian tribe, have a tradition of a supernatural teacher and benefactor, an old man who came to them in Nootka Sound long ago, in a canoe of copper with copper paddles, and, indeed, everything of copper about him. He landed, and informed the people that he came from the sky, instructed them in many things, and told them that their country would eventually be destroyed—that they should all die, but rise up after death and live with him above.

This angered the people, and they killed the prophetic messenger, a crime which brought

<sup>1</sup> *Vide* Bancroft, "Native Races."

them some material benefit, as ever since copper and its use have remained with them. Huge images carved in wood still stand in the Nootka houses, intended to represent the form and hold in remembrance the visit of this old man—by which visit is not improbably intended to be signified an avatar or incarnation of that chief deity or great spirit worshipped by many Californian tribes as “the Old Man above.”<sup>1</sup>

Bancroft quotes from another author,<sup>2</sup> who describes “a painted and ornamented plate of native copper, some  $1\frac{1}{2}$  feet by  $2\frac{1}{2}$  feet, kept with great care in a wooden case by the tribe at Fort Rupert, which was highly prized.” There is no explanation as to how this copper came among them. Probably it was from a piece of native copper hammered out, for it is to be recollected that the metal exists freely in a natural state in the northern parts of North America. “This plate of copper was oval in shape, painted with curious devices, eyes of all sizes being especially conspicuous. Similar sheets of copper are described by Schoolcraft, as in use among certain of the Vesperic aborigines. May they not all be intended for symbols of the sun such as that revered by the Peruvians?”

We shall recollect, in this connection, that an elliptical plate of gold was placed on the wall of the temple at Cuzco, as representing the Deity.

The Okanagans—another of the tribes of the North American Pacific coast region—says Bancroft, believe in a good spirit or Master of Life,

<sup>1</sup> Bancroft.

<sup>2</sup> Lord, *Naturalist*, vol. ii.

and in a bad spirit ; also they have their great mythical ruler and heroine, Scomalt, whose story is intimately connected with a kind of fall or paradise lost. Long ago, so long ago that the sun was quite young, and no bigger than a star, there was an island far out at sea called the White Man's Island, inhabited by a white race of gigantic stature, governed by a tall, fair woman, a great "medicine" called Scomalt. At last the peace of the island was destroyed by war, and the noise of battle was heard, the white men fighting with each other ; Scomalt was very angry ; she rose up, declared she would not be vexed any more with them, and drove the rebellious ones to the end of the island, which she broke off and pushed out to sea. Tossed about for days, the piece of land drifted, and all upon it died but one man and one woman, who at length were able to make a canoe, and after paddling for many suns they came to land. But their whiteness had changed to a dusky reddish colour, and all the people of the continent, who are descended from them are, according to this legend, of that colour as a result.

Another mythical being of pre-human race, the hero of a Deluge myth, was Qat, of the Melanesians—that black people of mysterious origin in the Pacific Islands and Archipelagoes. Qat, like so many other "culture-heroes"—Quetzalcoatl of Mexico and Huirakocha of Peru, for example—came or disappeared mysteriously, in his departure from Vanua Levu Island, and white men arriving in the island were mistaken for

him. The Melanesian mythology contains a prayer to Qat, spoken by the devotee who is supposed to be in danger with his canoe, quoted as follows: "Qate! Marawa! look down on me; smooth the sea that I may go safely; beat down the crests; let the tide-rip settle down away from me, that I may come to a quiet landing-place." Thus has man, in all ages, prayed that he may be brought to his "desired haven."

It would not be possible here to recount the numerous myths and beliefs of the various tribes of the North American coast, dealing with kindred matters, but they appear generally to embody some belief in a lofty, or Supreme Being, mixed up with more or less barbarous priestcraft.

For the remarkable prayers of the Mexicans the chapter in Bancroft<sup>1</sup> may well be studied, as well as Prescott. There is no doubt that in part they have been changed by Spanish chroniclers, but nevertheless they show sufficiently the innate reverence of the aboriginal heart, and a desire for communion with Omnipotence, which they expressed in what form they could.

As regards sun-worship, the extensive practice of this in both the New and the Old Worlds might well be taken as an argument for early association. But we must recollect that it is a very natural religion. When we have stood, as I have often stood, upon the bleak highlands of the Andes, waiting the sun, to pursue our journey,

<sup>1</sup> "Native Races," vol. iii.

shivering until his warm rays, preceded by the rose-tints of the dawn, fall upon us, we shall appreciate the feeling of adoration which the native felt for the flashing orb. The same may be said for Mexico. In the highlands the diurnal change of temperature is very marked, due to the elevation, and the early morning is often bitterly cold, and until the sun rises there is no life among the *peones*, who shiver or squat against the walls of their adobe huts, waiting the first sun rays.

The Polytheistic religious systems of the American tribes and others cannot be regarded as "uniquely savage" necessarily: recollecting the heaven of the Greeks and Romans, nor for that matter of the Roman Catholic Church to-day. The array of saints bulks larger in the mind of the poor Mexican or Peruvian than the Supreme Being, and the hideous fiends depicted by the priests in these countries—especially, depicted by the bedsides of sinners, waiting to carry them off at the last moment!—are certainly not less repulsive than the evil spirits of the savage mythologies of the Indians. Pictures of serpents with claws, wings, beaks and tails, and fiery eyes are sold in the streets, shops, and churches in Spanish-American towns, and the mind of many a tender maid has been stocked with horrors thereby, and by demoniacal teachings which have permeated her whole life. Even the Protestant Church has not yet outgrown these influences.

Into the details of their metempsychosis, and

the belief in immortality of the early American people, it would be impossible to enter at length here. Those who are interested therein will find an exhaustive discussion of the subject in Bancroft's work.<sup>1</sup> We shall always observe, in studying such subjects, how the accounts and opinions of travellers and observers differ, at times contradicting each other, pulled this way or that, doubtless, by the personal equation. But the evidence for the existence of the abstract world in the savage mind is generally stronger than that against it. Often beautiful and romantic conceptions are held; often they are marred by some serpent-trail of bestiality or cruelty. But there seems to be in these mythologies generally a kind of belief in poetic justice and triumphant virtue.

Among curious customs of the Indians of Central California that of the *couvarde* prevailed, that curious and ludicrous custom which is of such wide occurrence. When childbirth comes upon a wife the husband puts himself or is put to bed, and there lies groaning as if *he* were experiencing the labour pains; and he is nursed and tended by the women for several days with as much seriousness and care as if he were the real sufferer. This proceeding, which seems so ridiculous, may have arisen from some native philosophy or from the custom in primitive peoples of all ages, in which in early family life descent and heritage were considered as coming through the mother. It has been observed by

<sup>1</sup> "Native Races," vol. iii.

different travellers in Africa, India, China, Borneo, and elsewhere. I have heard of it in the remote interior of Peru; and among the Mexicans to-day it is a common belief that the husband feels unwell at the time his wife falls sick in pregnancy!

It is perhaps worthy of note that phallism, that form of Nature-worship based on the generative and reproductive powers of man, associated with Phœnicians, Greeks, Hindus, and others, obtained also in early Peru, Mexico, and Central America, showing that the worship of the reciprocal principles of Nature was world-wide. The sculptures upon some of the Central American buildings, when first seen by some of the foremost students of that region,<sup>1</sup> were found to represent *membra conjuncta in coitu*. In Peru the attention of the traveller will be drawn to the "indecent" relics of the Incas, in small moulded or sculptured images recovered from the *huacas* or tombs. I have had such offered me in sale by native women, who, however, saw nothing remarkable about them, and if I blushed they did not. The monolithic pillars of early America, especially at Copan, are considered to be emblems of this form of worship, and are described as similar to the sculptured phallus-pillars of the East. Images found in various parts of Mexico and Peru are remarkable for their bestial character often. They are to be seen both in museums and in the possession of Indians in remote districts, recovered from burial-

<sup>1</sup> Stephens and Catherwood. See Bancroft.



places, and whether they represent mere pernicious caprice on the part of their makers, or whether they have some emblematic significance, it is impossible to say. As a rule, or at least as far as my observation goes, the Indians of Spanish-American countries are not by nature indecent-minded, but modest.

I do not know whether it would be admissible to endeavour to trace any connection with the Old World through the phallic cult—if such it is and may be termed—unconsciously followed by the native *arrieros* and messengers in the Peruvian interior. It is to be recollected that Hermes, among the Greeks, was the protector of travellers and the god of roads and doorways, and his images were used as boundary-marks. In certain places a phallus served as his emblem. It was usual to form a cairn of stones round or near his images, every wayfarer adding one. In my journeys in Peru I observed—as any traveller would—the custom of the mule-drivers in depositing, upon reaching the summits of passes, a stone to the heap of stones and pebbles which had accumulated there, generally around the wooden cross often placed at such points. I have noticed them descend from their mule even before reaching the spot to select a stone for the purpose. Questioning them on various occasions as to this, they replied that it was an ancient custom, and further, that it was done, they said, as a test of the fidelity of their wives in their absence; for if on the return journey homewards the stone they had placed there was undisturbed their

women had been faithful ; otherwise the husband had been betrayed, and upon reaching his habitation it was likely that castigation would be given to the unfortunate woman !

The Indians of the Chaco—that enormous and savage region of South America—removed from the Andes, and its old civilisation was, nevertheless, probably influenced in earlier times by the Incas, who may have penetrated into parts of the continent of which all traces are now lost. That the Incas did influence the peoples of the *Montaña* or upper forest regions is well established.<sup>1</sup>

The religious beliefs of the Chaco people embody the idea of the Creation, and singularly enough they regard the beetle as the symbol of the creative power, a feature of their mythology which is remarkable in its close resemblance to the Egyptian *Scarabæus*, says a writer in a book recently published.<sup>2</sup> “ The Creator of all things spiritual and material is symbolised by a beetle among these people. The Creator in the guise of the beetle—having first created the material universe—sent forth from its hole in the earth a race of powerful beings who for a time appear to have ruled the universe. Afterwards the beetle formed man and woman from the clay which it threw up from its hole, and they were sent forth into the world joined together like the Siamese twins. They met with

<sup>1</sup> See my book “ The Andes and the Amazon.”

<sup>2</sup> “ An Unknown People in an Unknown Land,” W. B. Grubb, London, 1911.

persecution from their powerful predecessors, and accordingly appealed to the creating beetle to free them from their disadvantageous formation. He therefore separated them, and gave them power to propagate their species so that they might become numerous enough to withstand their enemies. It then appears that some time after this the first-created powerful beings disappeared, and the beetle ceased to take an active part in affairs of the world. It is rather remarkable when we consider that they have no written records, and no system of carefully transmitted traditions, that they should retain a belief in an original Creator and in the immortality of the soul. Representations of the beetle and figures associated with it are the most common mythological drawings on the gourds of these people. They regard the soul as immortal, but as simply a continuation of the present in a disembodied condition."

This writer draws attention to the analogy of the Chaco beetle myth with that of the Egyptians, and quotes the "Dictionary of the Bible." <sup>1</sup> The beetle myth is spoken of: "Out of the mud which the Nile left in its flooding men saw myriad forms of life issue. That of the Scarabæus was the most conspicuous. It seemed to them self-generated, called into being by the light, the child only of the sun. Not only in Egypt, but in Etruria and Syria and other countries the same strange emblem appeared."

In observing the nature of customs of remote

<sup>1</sup> Smith.

lands, the traveller is himself sometimes a biased personage. He may be influenced in his investigations, at times unconsciously, to represent things as he would rather they were than cold-bloodedly to render their exact scientific value. This was very marked in the early Spanish missionaries, who were often divided in their desire on the one hand to denounce the "idoltrous customs" of natives, or to make the aboriginal rites and fables conform with "revelation" on the other—the revelation, that is, of the Christian doctrines. This was especially the case in Spanish America. For a long time in Peru there existed a stone with a mysterious mark upon it, which, however, the Spanish priests explained as being a miraculous footprint of one of the apostles, who, they averred, must have visited that region! Even in modern times the missionary has sometimes eagerly set out to prove that the myths of his heathen flock are but a corrupted version of Biblical happenings, and that this or that myth is corroborative of this or that Scriptural incident; or, on the other hand, he, with professional zeal, teaching that religion can only come by revelation, will pooh-pooh the native myths, and exclaim that they contain no religion at all. In the one case he falls into the condition of accommodating all he hears to what he terms "the truth," and in the other despises or neglects the study of the myths of his savage flock. Thus missionaries are sometimes biased.

It would not, however, be fair to make this

indictment against all missionaries ; for it is a well-known fact, and especially as regards the Pacific Isles, that missionaries have been the medium for a great deal of our scientific knowledge—knowledge, obtained during their praiseworthy work and self-sacrifice, which otherwise would have been lost to science. Moreover, the ordinary or the scientific traveller who is not a missionary may incur equally grave errors. He may be on the one hand a sentimentalist, or, on the other, a materialist. The first attitude will cause him to read Divine meanings into myths and customs which are entirely unwarranted, whilst the other, believing nothing except what “ the evidence of his senses ” affords, cannot admit anything noble or lofty in the mind of the poor savage, and derides any supposed glimmerings of the notion of a God in his myths and altars. Another type of traveller is he who puts versions of Biblical or historical matters into his native informant’s mouth by suggestion, and who, in the very act of asking how the Creation of the world came about, or if they had ever had a Flood and if any one was saved and how, is perhaps furnishing the savage with an opportunity for romancing in the suggestion advanced : something he had never thought of before.

Further, the good faith of the traveller must be above suspicion, and to give weight to his evidence this must be established, as well as his means of communicating with the savage or native, and his judicial powers. It has even been

stated that such evidence is most valuable when given by ignorant men, who are astonished at meeting with things that ethnologists are already familiar with in different parts of the globe. Also "undesigned coincidences" are valuable, corroborating the observations of travellers, ancient and modern. But the traveller, whoever he may be, who has an open and sympathetic mind towards the native, will find how often he will meet him in conversation as man to man, when mutual confidence has been earned and neither is imposing upon the other. From my own experience of natives or aborigines, I do not think they are generally liars, or prone to inventions of stories. As a rule, they are impressed by natural truths, and communicate these impressions rather than employing ingenuity to fabricate things. Their natural tendency is to tell the truth rather than otherwise, and they are less prone than "civilised" man to distort facts. The deliberate garbling or falsification of news is foreign to the "Indian" character. The political and Press liars, who are so marked a feature of English and American life, in which circumstances are wilfully distorted to serve certain ends, are a growth of civilisation. The Indian generally tells you what he really sees or thinks. He often has admirable traits of fidelity and accuracy. In Spanish-American countries, such as Peru and Mexico, there is abundant opportunity for observing this fact when the traveller is in a position and of a disposition to come into direct contact with the aborigines. The *mestizo*,

or person of mixed Spanish and native blood, of whom the higher classes consist in the main, is far more "ingenious" in the matter of twisting facts to his own advantage, and his native sense of honour is far below that of the *raza conquistada*, or conquered race. The modern Spanish-American, urbane of manner, never at a loss for words and reasons, often hospitable and perhaps too fulsomely courteous, will sometimes close an agreement with you and cheat you afterwards if he can: a thing the Indian would not do.

As I have remarked elsewhere, extreme painstaking care marks the Mexican or Peruvian Indian in his small handicrafts, or in his methods of work and observation. I have often observed this quality with surprise, and have specially noted the fact that when employed to act or inquire, their information was generally correct. The attitude of the man of Spanish or mestizo race towards the Indian is often one of contempt, and he may pretend to dismiss your own characterising of them and their stories with a "*Son muy mentirosas, señor*" ("They are great liars"). It is, probable, however, that when they are liars they have in the main learned the art of perversion of the truth from the white man. From these reasons I believe that native legends have considerable value. They are not "Press notices," but are records of impressions.

As regards myths and stories concerning the Flood, these are seen to be common, and "a conspectus of illustrative Flood stories from different parts of the world would throw great

light on the problems before us," says a recent authority on the subject. The Mexican deluge myth as well as the Tower of Babel story of Cholula have been mentioned. The early Peruvians had an "inspired llama" Flood-story, of how a llama warned its master of a pending cataclysm and how both reached the peak of a hill in time to escape. It is to be recollected that the Aztecs and the Incas both inhabited regions subject to flood, the first in the periodical inundations of the Valley of Mexico, which, being a hydrographic entity, had no outlet, and the others in the appalling tidal waves that have devastated the Pacific coast of South America even during its known history, as a result of volcanic or tectonic activity. However, the North American tales show clearly "that the deluge is properly a second creation, and that the serpent is as truly connected with the second chaos as the first. One of them, too, gives a striking parallel to the Babylonian name Hasis-Andra (the Very Wise) whence comes the corrupt form Xisuthrus; the deluge hero of the Hare Indians is called Kunyan, the intelligent. Polynesia also gives us most welcome assistance, for its Flood stories still present clear traces of the primitive imagination that the sky was a great blue sea, on which the sun, moon, and stars (or constellations) were voyagers." The prevalence of deluge stories among North American myths—which often "distinctly connect serpents with the deluges"—is well known,<sup>1</sup>

<sup>1</sup> See "Deluge" in the last edition of the *Encyc. Brit.*



and the temptation to think that they may all have had in remote ages a common source is strong. Serpent worship all over the world, from Mexico to Asia, Scotland, Ireland, and Scandinavia in extremely remote times, certainly seems to give an idea of some ancient universal cult.

A study of myths, far beyond what it would be possible in these pages even to hint at, shows how similar such may be among nations far removed from each other—the Semitic and Indo-European races, the Australians, the South Sea Islanders, the Eskimos and the Zulus, the Mexicans, the Peruvians—as if they had been handed on throughout great extensions of time. The question arises as to whether such things are purely “human,” and have arisen independently from the savage state of the intellect and are but the early products of the evolving mind, or whether their diffusion is due to transmission and borrowing. Some may argue that myths could spring up anywhere, and as time went on become part of accepted beliefs and literature.

In the consideration of this subject we may, if we desire, enter into the realm of the mystic and the prophetic, of Theosophy and theology. I will quote here from a singular and interesting book by Kenealy<sup>1</sup> in which are frequent references to the lost continent of Atlantis in connection with Enoch, and the statement that part

<sup>1</sup> “Enoch : the Second Messenger of God,” Edward V. H. Kenealy, LL.D., D.C.L., London, 1872, which I happened to come across after concluding this book. (See also page 43).

of the writings of Enoch "is a prediction of the Atlantean Deluge." "From the description of what happened to Enoch in the first chapter of his book it is evident that he was one of the trusted priests of the temple; a night-watcher or astrologue of the highest degree, called by the Phœnicians 'contemplators of the heavens.' The great eminence to which he rose in astronomical and scientific knowledge entitles us to believe that he was of supreme rank among the wisest men of his era."

The following is the passage referred to, which I quote from the version given by this author:—

"Destruction is but the prelude to Renewal;  
 Death is but the portal of Life;  
 Every truth must be made anew.  
 Behold I saw the Heaven in a blaze of purity,  
 And I saw the Earth absorbed into an Abyss,  
 The rolling sphere inclined,  
 The moment of destruction was at hand;  
 Mountains suspended over mountains,  
 Hills sinking upon hills,  
 Lofty trees toppled headlong,  
 They sank downwards into chasms;  
 My voice faltered, I cried out and spake:  
 'Lo the earth—it is destroyed!'"

Exceptionally beautiful are the words preceding the passage, in which Enoch describes his vision of the past, how he saw a city splendid with gold and marble, with stately towers, palaces, and temples, how he asked the guardian of the gate how long the city had stood there, and received the reply that it had stood there always, and would always stand, years without

number. Then a cloud rolled over him ; a thousand years passed ; he sought the city again, only to find a desert where it had stood. Asking a wanderer whom he met where the noble city was, he received the reply that no city had ever stood there—desert it had been always. Another cloud and another thousand years, and seeking the desert, he found a forest, and asking one who reclined beneath a tree as to the departed desert, was told that no desert had ever existed, that a forest had always been there and would greenly flourish there until the end of time. Again a cloud and a thousand years, and seeking the forest, Enoch found tents and smiling plains, flocks, herds, children playing among flowers, and asking a venerable father how long those sweetly-blooming fields had existed, learned that they had always been there, from the first moment of the world. Once more a cloud and a thousand years and going that way again, behold ! a great ocean rolling, with huge billows, and no sign of life save a solitary man in a boat, who in reply to Enoch's inquiry as to where were the tents and smiling landscape, replied : " Thou drest ; there are no fields nor tents, nor ever have been, but from the first these waves have rolled over the boundless deeps beneath ; and they shall roll for ever and ever, unchanged and mighty as they now be." I have condensed this passage from the original.

Enoch the Prophet, the second messenger from God to man," the author says, " was called the Prophet because he first made known to

the initiated in the mysteries the terrible convulsion which buried Atlantis in the bottom of the sea—part of the extraordinary prophecy relating to the Flood. ‘And I saw that the earth became inclined.’ This is a most extraordinary assertion, that the Flood was caused by the disturbance of the axis of the earth, and is totally original and unexpected. I look upon it as a very curious and ancient tradition respecting the cause of the Flood, which has been considered to have been its real cause by many, both of the ancient and modern philosophers. Few persons who have read the Book of Enoch will deny that this is a most curious and striking tradition.”

It is to be recollected, in this connection, that recent authorities describe a much later date and varied authorship for the Book of Enoch.

In the above-mentioned book—and it is really the object of quoting it here—there are many allusions to a connection between the ancient world of Asia and the old civilisation of Mexico and Peru, some of which I quote here, in which the old, well-worn arguments are given.

“All the traditions maintain that a person whom *we* call Noah, by some means, no matter what they were, foresaw that destruction approached. Tradition says that he erected pillars with inscriptions in the land of Suri-Ad, or the Holy Sura. . . . Now, if we suppose that ruin did not happen in a moment, but that a year, or even more time, was required to effect the whole

by successive earthquakes, is it not possible, if such a scientific and sacerdotal Government existed as I have contemplated, that the Supreme Pontiff and the Court may have saved themselves and their sacred literature in a ship or floating house? . . . And why should not the axis of the earth have become changed to its utmost extreme by earthquake shocks? . . . hundreds or thousands of years before, and the last shock a very moderate one, just enough to sink Atlantis? . . . The result, says Nimrod, (iv. 91), arising from the earth's new axis was a vicissitude of climate such as had never been known before, *siccis aër fervoribus ustus, canduit, et ventis glacies adstricta perpendit*. Then first the air began to glow with dry heats and the ice hung bound by the winds (Ov. *Met.* i. 119). The change of seasons introduced a remarkable change in Nature. . . . This proves that the author of Nimrod had no doubt of the Atlantean—that is, the true—deluge. A further observation may be made on *the signs of the secret things*, that we find traces of them still in the strange, unknown idols and characters of the Central cities, and their long-lost inhabitants—idols and characters which to the Spaniards appeared magical, and so they hastened to destroy them. These characters have, in many cases, resemblances also to the primeval Tartarian figures. Hence we find Humboldt exclaiming that striking analogies exist between the monuments of the old continents and those of the Toltecs, who, arriving

on Mexican soil, built these colossal structures, truncated pyramids, divided by layers, like the temple of Belus at Babylon. Whence did they take the model of these edifices? Were they of the Mongol race? Did they descend from a common stock with the Chinese and the Japanese? *It is now confessed that the original colonists of the Central Americas came from Asia, which contains all the physical and mental prototypes of the race.*<sup>1</sup> Language, mythology, religion, dogma, their style of architecture, and their calendar as far as it is developed, point to that fruitful and central source of human dispersion and nationality. Can it be doubted that after this Enochian priests carried this religion into the American continent? ”

A further passage says: “ No unprejudiced person can doubt, when he has considered all the circumstances of similarity which have been pointed out between the natives of Mexico and the Asiatics, that the former were originally peopled from the latter by means of ships, and not by passing by an almost impassable passage over the frozen region near the North Pole. . . . Was Columbus the first discoverer of America, or did he only redeem the continent after it had in remote ages been found, peopled, and forgotten by the Old World? It is curious that this question has not been more generally raised, for it is very clear that the people whom Columbus found in America must have been descended from emigrants from the Old World,

<sup>1</sup> The italics are by the author quoted.

and therefore America was known to the Old World before Columbus's time. Probably this communication took place on the opposite side of the world to ours, between the eastern coast of Asia and the side of America most remote from Europe, and it is quite possible that the inhabitants of Eastern Asia may have been aware of the existence of America, and kept up intercourse with it while our part of the Old World never dreamt of its existence. The impenetrable barrier the Chinese were always anxious to preserve between themselves and the rest of the nations of the Old World renders it quite possible that they should have kept their knowledge of America to themselves, or at any rate from Europe. The objection that the art of navigation in such remote times was not sufficiently advanced to enable the Chinese to cross the Pacific and land on the shores of America is not conclusive, as we have now found that arts and sciences which were once generally supposed to be of quite modern origin existed in China ages before their discovery in Europe. . . . Why, then, should not the Chinese have been equally or more in advance of us in navigation? . . . One fact, corroborative of the idea that the Old World, or at least some of the inhabitants of Asia, were aware of the existence of America before its discovery by Columbus is that many of the Arabian writers are fully convinced that the ancient Arabian geographers knew of America, and in support of this opinion point to passages in old works in

which a country to the west of the Atlantic is spoken of. An Arab gentleman, General Huessin Pasha, in a work he has just written on America, called "En-Nessr-Et-Tayir," quotes from Djeldeki and other writers to show this. There is, however, amongst Chinese records, not merely vague references to a country to the west of the Atlantic but a circumstantial account of its discovery by the Chinese long before Columbus was born. A competent authority on such matters, J. Hanlay, the Chinese interpreter in San Francisco, has lately written an essay on this subject, from which we gather the following startling statements, drawn from Chinese historians and geographers:—

“ ‘ Fourteen hundred years ago even America had been discovered by the Chinese and described by them. They stated that land to be about twenty thousand Chinese miles distant from China. About five hundred years after the birth of Christ, Buddhist priests repaired there and brought back the news that they had met with Buddhist idols and religious writings in the country already. Their descriptions in many respects resemble those of the Spaniards a thousand years afterwards. They called the country "Fusany," after a tree which grew there, whose leaves resemble those of the bamboo, whose bark the natives made clothes and paper of, and whose fruit they ate. These particulars correspond exactly with those given by the American historian Prescott, about the Maguey in Mexico.’ ”

The Mexican maguey (*Agave americana*) is



one of the most valuable plants in Mexico, put to a wide variety of uses, and the source of great wealth in the production of the national beverage *pulqul*.<sup>1</sup>

The above-quoted writer speaks of the "religion, peace, security, and magnificent structures of the mighty kingdom of Atlantis" as having been "brought from Asia into Atlantis by the Enochian religion, from which it diffused itself throughout the vast region of Central America." He also speaks of the reason of the destruction of the supposed Atlantis, attributed by Nimrod to punishment from above for the vices of its people, and quotes Plato as to Nimrod, that the Deluge did not kill the Atlantoidæ, but sent them "under the ground." This is reminiscent of the Mexican flood story and hieroglyphics, which is given on another page.

Mysticism, indeed, has occupied itself a good deal with ancient America as connected with Asia, and in the works of the famous exponent of Theosophy, Madame Blavatsky,<sup>2</sup> some curious inferences are drawn.

The present book was in the press when by chance I happened to open "Isis Unveiled" and "A Modern Panarion," works I had never before read, and did not know contained—like Kenealy's "Enoch"—numerous references concerning the origin of the early American civilisations. These, whilst fantastic

<sup>1</sup> See my "Mexico."

<sup>2</sup> "The Secret Doctrine," "A Modern Panarion," and "Isis Unveiled."

in some instances, are of extreme interest in others, both as concerns the early Mexicans and the early Peruvians, and their supposed connection in remote times with Babylon and Egypt, by early voyagers from Asia, as well as with the fabled Atlantis. These theories, of course, were dealt with by Brasseur de Bourbourg, Lord Kingsborough, Le Plongeon, and others whose theories have been discredited or derided. The time, however, is probably passing when it is necessary to deride that which cannot be explained by dogmatic methods. Imagination has never yet received its due as a precursor of fact in any branch of science or human work, but its value is being more greatly recognised to-day.

Perhaps the most insistent argument of the exponent of these "esoteric" views is, that during the gradual sinking of Atlantis, part of the Atlanteans went eastwards, to the "old" world, and part westwards to the new," founding or influencing both civilisations—a hypothesis which at least has the merit of explaining certain attributes of early American culture which offer at present great difficulties to the theory of an Asiatic origin alone.

To pursue these matters of affinities and comparisons farther here, however, is but to travel in a circle, a mode of progression which no traveller enjoys.

## CHAPTER XVIII

### A SUBLIME COSMOGONY

Anthropoid to architect—Necessity for more research—A many-sided subject—More light required—What is our foundation?—Teachings of archæology—History repeats itself—A dim and distant stage—Retrospect of human movement—The great antiquity of mankind—An endless argument—The “All-Father”—A universal culture in remote times—Babel and the Flood—A golden age—A universal texture.

HAVING completed the survey, literally from China to Peru—and investing, perhaps, that well-worn simile with a new meaning—it remains to sum up, or rather to gather together the main threads of this far-reaching problem. The survey is a wide one. I entered upon it with hesitation, and, in concluding, hope that indulgence will be accorded to its inevitable shortcomings. From anthropoid to architect, from the gibbering savage to the psalmist-supplicator of the “Unknown God,” through which vast field the presence or evolution of man in these Pacific-washed lands has ranged, is indeed a long journey; and if any excuse is needed for so ambitious a task it must be in the fact that it has not been attempted before, and that it is

time a more intensive effort were given to the solution of the matter. It is indeed astonishing that greater popular and scientific interest has not been taken in this subject.

We have seen how extensive and alluring is the field which its investigation affords, and it cannot be doubted that results would follow a painstaking and minute inquiry into all the factors and conditions connected with it. An example of how we may begin to lift the veil from the past is shown by a recent work <sup>1</sup> dealing with the discovery of North America before Columbus, how, by close research, old facts may be put in their true light and new facts unearthed. But this can only be carried out by those who command full leisure and the wherewithal for its accomplishment. To perform it adequately we should have to ransack Europe, Asia, Africa, and America, not only on library shelves but in museums, tombs, ruins, deserts, and mountains. Ample time and a long purse are the adjuncts, coupled with that philosophical love of the past doings of mankind—not simply as being antique, but as bearing upon life and time as a whole, which furnishes the true detective-faculty of the investigator—which will, as time goes on, solve the Secret of the Pacific. One of the drawbacks hitherto has been in the fact that those who have been foremost in the archæological study of the Old World have not dealt much with that of the New—perhaps they have despised it—and that those whose field

<sup>1</sup> "In Northern Mists," Nansen, 1911.

has been the New World have not had much knowledge, except perhaps from books, of the Old. It will be when these two fields of knowledge become combined in the same study that more conclusive results may be looked for.

I am well aware that to endeavour to describe the monuments of early America and the Pacific, and to attempt to discuss their culture areas and origins within the scope of a single short volume—matters upon which in their separate spheres a whole library has been written—was a project difficult of attainment, and I have contented myself with broad outlines mostly. But at least others may be stimulated thereby to take down their maps, encyclopædias, and books of travel—perhaps to set out themselves—and arouse the somewhat sluggish English-speaking public to the romance which ethnology affords in this comparatively little-trodden field.

Geological, biological, cultural—all these three phases of evolution have perforce come under consideration, and they present their respective problems, which must be solved in the future. The question of the former disposition of the continents; their connection with others; the “land-bridges” between them, over which man or his ancestors may have passed; the disappearance of continents whose inhabitants have had to seek another refuge; the vanishing of Atlantis—if such be allowed within the realm of the possible; the vanishing of a Pacific continent—if this also may be debated—of these matters we have learned practically all we know in the last half-

century or three-quarters of a century, and we have much to learn still.

Biologically, what is the basis of our knowledge of man's evolution and our assigning of his probable early starting-point or cradle-land? Clever and elaborate theories and reasonings: and a few scattered bones of a man-ape in a drift in a Java forest, matters which can scarcely be looked upon as more than a working hypothesis, and which might be upset by some discovery to-morrow! We might find that our beliefs as to man's physical beginnings are wrong. Some turning of the lane of science, thought, reason, may endow us with another origin.

Then, as to man's cultural evolution and advancement, upon what do we found our knowledge? How have we assigned to him his first habitations and communities and the cradle of civilisation? Upon archæology, which, not much more than a generation or two ago, read the literature of Babylon and Egypt, and, by establishing some missing links of walls, potsherds, and papyri, added four thousand years to our history. But there must be vast periods of mankind's activity, all over the world, of which at present we know nothing. New findings of antiquity are being made rapidly, and we believe that new and perhaps startling discoveries yet lie before us as regards the history of our race.

Furthermore, it would seem that history is but repeating itself in the covering of the globe by mankind. When we consider the profuse migrations of peoples in very early days, we are con-

fronted with the fact that man seemed to move about over the earth as easily, or at least as freely, then as in these days of railways and steamers ! At any rate, we to-day are but repeating the migration of early times. The world "boiled over" then as it is doing to-day. Arabs, Chinese, Hindus, Italians, Germans, British are encountered on every hand. At the building of the Panama Canal at the present time we encounter an astonishing mixture of races : Japanese, Chinese, East Indians with flowing beards and embroidered caps or turbaned heads, Arabs, negroes, British, French, Dutch West Indian, and native Spanish-American Indians. In North America the Anglo-Saxon peoples are trying their best to keep out the Asiatics, whilst the South Americans endeavour to attract them. Even in remote villages and mining camps in the Andes we find Arabs, Austrians, Chinese, Italians, Spaniards, Jews, and others, generally engaged as shopkeepers, in the congenial occupation of making money—and this as a rule by the cheating of the native in short weights and high prices : also a very ancient custom !

In Asia especially history shows these ebullitions and migrations of people have taken place in remote periods, and their study brings conviction to the mind of the great antiquity of mankind and of vast periods and movements of which to-day we know practically nothing. The shadows of past peoples and empires seem to deploy upon their stage before our eyes in strange and shadowy array, their migrations,

their temples, their tombs fading away into the mists of some Great Period, out of which, from time to time, the spade of the archæologist reveals new fragments. Let us be assured of one thing. There have been happenings in those remote times which will startle us when we learn about them, as inevitably we shall. We have yet to learn things of mankind's history which may upset some of our ideas to-day.

When we come to sum up the opinions for and against the influence upon and peopling of America from Asia we find a preponderance on the affirmative side. The position of those who would close America absolutely to prehistoric influence and immigration is as untenable as that of those who would close it against foreign immigrants and influence to-day. America is not, and never has been, a world apart, and its discovery by Columbus must have been one of a series of visits made to the twin continents since geology rendered them an entity. America largely draws its population and its culture—both—from the Old World to-day, and must have done so in early times.

Whilst it is not the intention of this book to affirm or deny, I would venture to urge that the "open door" to ancient Asia be maintained. To isolate the three Americas throughout the enormous periods that have elapsed since man inhabited the world is unnatural. There was no such purpose in Nature. We, ever looking for the regeneration of mankind, might have cherished the illusion that America was to be



reserved as the clean new land of a selected race from the Old World, a people who might have made a step forward in civilisation and in lightening the burden of misery and oppression that weighs upon mankind. Was it so? Far from it. The United States have but perpetuated, and, indeed, exaggerated, the evils of the Old World, and themselves seem to show signs of decadence already. As for Spanish America, its communities are still in the Middle Ages of social life, except where they have, in some cases, emerged to conditions approximating to those of the United States or Europe. Nature therefore had nothing in view in this respect of an ideal man in an ideal home, and we can but regard the three Americas as part of the world which must fight its way on conjointly to social betterment.

At the beginning of the second decade of this century society is in a marked state of flux. We may expect anything, from a world-wide revolution of labour against capital to the total extinction of nationalities. In the physical world we have long dwelt in security, but there is no guarantee that changes might not occur, such as could suddenly alter the configuration of seas and continents. One thing is certain—the too material culture of to-day has yet to yield to something nobler.

In considering the origin-myths of nearly all the ancient peoples dealt with in this book, we are struck by the legends so commonly occurring of their having come “out of the sea,” or of

having migrated in some mysterious manner from some forgotten place, and this inclines the fancy towards distant or vanished continents.

When we glance back at all these strange wanderings, traditions, and legends we seem to see bands of ancient people, led by resolute patriarchs, pressing onward through mountain fastnesses and tangled forests, halting painfully in their way across waterless deserts, settling here and there where smiling valleys spread their allurements, and where streams gushed forth from the hillsides. We seem to see strange vessels and canoes setting forth adventurously into the unknown, manned by active rowers, leaders in the prow, with their hands shading from their eyes the rising or the setting sun, peering anxiously forward to catch the faint blue line of hoped-for land, or occasionally turning a backward glance to dim shores far astern which they had left for ever. Into the strange waters, whether in the frigid North, whether in the tropic seas of the South, they must have urged their frail prows, from island to island, from promontory to promontory, or even venturing across shoreless seas, voyages which have left little more track upon history than they did upon the silent ocean which bore them. Again we mark these eager immigrants, voyagers no longer, wanderers no longer, busy with flint, axe, and chisel, quarrying, chipping, and carving : turned masons now, and bringing to being examples of work more wonderful, in comparison with their resources, than the work of the masons to-day. Look at

them. What prodigies of art they are performing ! Mark the loving care with which they fit stone to stone ; behold the marshalling of strength to raise their weighty lintels, pillars, idols, architraves. See them in consultation, bringing to mind the figures and patterns of the art of the lands they had left, striving faithfully to reproduce them, delving into memory, and perhaps scanning meagre records of design on belts and clothing preserved in their long wanderings. It may not be a mere flight of fancy that the dispersal of the people of the Flood and the famous Babel Tower holds some key to the enigmas of time and civilisation. " Go to, let us build us a city and a tower that will reach to heaven. Let us make a name, lest we be scattered upon the face of the earth and our name perish," must have been the animating motive, in great part, of the Toltecs, the Aztecs, the Incas, the Polynesians, and other ancient people who have left their strange monuments to posterity.

Among nearly all the ancient myths, as we think, of peoples removed from each other by vast oceans even, myths interwoven and disguised often by bloody rites and hideous and idolatrous customs, we seem to trace nobler and spiritual features and purer beliefs, as if behind them, or having intertexture with them like the gold threads which barbaric weavers wove into their textiles, there runs, like a redeeming dream, some constant glimpse of an " All-Father."

Furthermore, the feeling is strong that all knowledge has come from some primeval centre,

and that the myths and fragments of prehistoric times which we find scattered about the world to-day are offshoots or remnants of such a centre. There must have been something in the remote past, I venture to repeat, about which we have yet to learn, something which may astonish and perhaps elevate us when we have learned it, something of which all the archæological discoveries we are constantly making are perhaps only as the leaves of a book that, page by page, we are turning over—a book of which we have had to begin at the end. Was there perhaps, long ago, really some “Golden Age,” when man was spread over the earth and lived and worshipped in the full enjoyment of its kindly fruits, and the seeds of the Tree of Knowledge were scattered far and wide—an age of which these monuments and our philosophies to-day are but fragments? Has man always striven in the sweat of his brow to gain his bread, in cruelty and oppression, as under Pharaoh and Belshazzar, and as under the “machine age” of to-day?

The possibility of some world-wide culture in very remote times, when perhaps continents and islands were differently disposed, is an attractive romance, perhaps with some measure of actuality behind it, which will receive greater attention as time goes on. Scientific theories and knowledge about that remote and mysterious period when man appeared, from which geology and ethnology are slowly taking definite shape, may wear a very different aspect in the future. At any moment

new discoveries may yield something. Perhaps we shall be right in thinking it all part of a greater problem concerning man and his arts in ancient times, all over the world, which we have yet to solve—part, perhaps, of some sublime and universal texture, which time could not annihilate and which seas and deserts were insufficient to sever. But, be it as it may, the answer to all these problems must surely be revealed sooner or later ; and the final solution of the Secret of the Pacific cannot be more than a question of time and research.



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